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ABSTRACT

Educators from throughout the State of Missouri contributed to the training workshop handbook which presents guidelines for implementing career education programs. Six sections include: (1) Missouri Career Education Today and Tomorrow, discussing current and future trends, and presenting a conceptual framework; (2) Getting Started, refers the user to the booklet "Guide for Implementing Career Education," which is not included in the document; (3) Determining Needs, explaining the needs assessment process; (4) Program Direction, discussing the development of goals and objectives, guidelines for their writing, and their inclusion in evaluation procedures; (5) From Plan to Action, examining the organization of teaching strategies for the classroom in terms of process and presenting (organized by grade levels K-12) specific learning activities and ideas related to subject matter areas; (6) Resource Utilization, presenting guidelines for selecting and utilizing human and material resources. Appendixes are organized according to related chapters and include: a glossary; needs and resource assessment formats, table of random numbers, a list of available needs assessment instruments, data sheet forms; materials discussing goals, behaviors, and behavioral objectives; sample instructional materials, teaching aids, and forms; and a list of sources of free education materials, organized by occupational area. (LH)

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FIELD TEST EDITION

Missouri Career Education
Training Workshop Handbook

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Missouri Career Education
Today and Tomorrow

Getting Started

Determining Needs

Program Direction

From Plan to Action

Resource Utilization

Appendices

FOREWORD

In spite of criticisms to the contrary, our educational system is the most creative and responsive program of education ever developed by any nation at any time. The educational system of our country is a world resource. Never before in the history of mankind has a nation of people had as much formal education. Education has been adaptable to the needs of society and to the individual. Of great importance is the fact that even though education has become big business it has been adaptable and accountable.

In order to avoid a label of looking through rose colored glasses, I must add the obvious: This is not the best of all possible worlds. There are occasional skeletons. There is always the need to look for improvement. There are special questions. "What have you done for me lately?" is not an entirely unfair question.

Educators are now being tested for an ability to enable each individual and society in the tasks of enabling graduates to find productive lives, to know how to conserve energy, and on and on. In other words the complexities of society are placing stress on the schools to provide educational programs that will enable students to make successes of lives in a changing world. Is our system up to the task?

This publication, "Missouri Career Education" is but another evidence of the adaptability of education and the institution it represents. This publication will contain inputs from many educators from every geographic area of our state. Students will have helped in the formulation of the concepts presented.

Marion Starr, Supervisor of Career Education, has provided leadership and direction. He has been assisted by Dr. Norman Gysbers and Ms. Carolyn Magnuson of the University of Missouri-Columbia.

Career Education as proposed in this plan is a new thrust at the state level. It does not presume to provide a rigid inflexible plan, nor to provide all the answers for the school people. Rather, it is conceived in this publication as a program with the basic principles outlined in such a way that each of the schools of the state can follow in the development of a career education program to meet the needs of their students.

This publication is an introduction to career education as a movement. It tells how to get started. It explains the way a school can go about the development of a comprehensive blueprint to meet the needs of everyone involved and utilize information to achieve program direction.

This publication shows how to move from plan to action. It shows how goals and objectives can be developed and how evaluation can be applied to determine future activities and direction.

In reality this program of career education has as an objective the development of an adequate self of each and every student in Missouri schools. This ideal has never been realized but it is a worthy goal. We must focus on an adequate self because anything short of this is a loss for an individual and for all of us collectively. Eric Hoffer has stated it as follows:

> To believe that if only we had this or that we would be happy, or to pursue any excessive desire, diverts us from seeing that happiness depends on an adequate self.

Charles Foster
Director
Guidance Services

Acknowledgements

Any time a document of this sort is developed there are numerous people to whom the authors are indebted. The publication of this Training Handbook is no exception.

We are first of all indebted to those who offered us every-ready consultation and support in our efforts--Charles Foster, Norman Gysbers, Tom Mock and Earl Moore.

The creativity of the Career Education Curriculum Project staff--Edna Bernhardt, Suzanne Dunlap, Harriet Jardine and Marilyn White--has helped to make planning the workshops enjoyable.

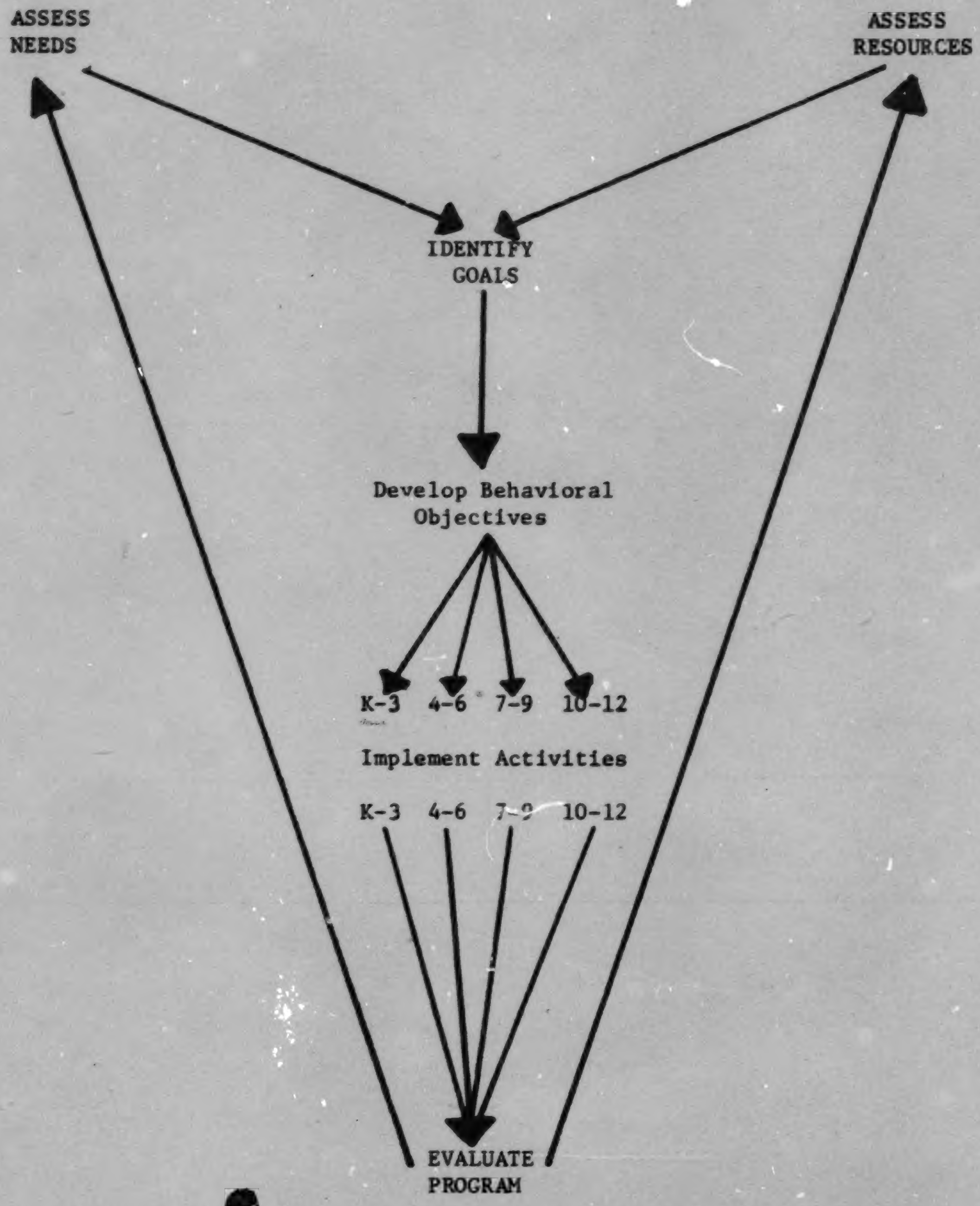
Without the talent of Jackie Butera and her expertise in planning and typing we would never have made the printing deadline.

In addition to these Missourians, we are grateful to The Center for Vocational Education, The Ohio State University, for allowing us to draw freely from their Field Test Version of the Career Planning Support System/Operation Guidance behavioral objectives procedural guide.

Marion Starr

Carolyn Magnuson

Program Development Process


ASSESS NEEDS
ASSESS RESOURCES
IDENTIFY GOALS
Develop Behavioral Objectives
K-3
4-6
7-9
10-12
Implement Activities
K-3
4-6
7-9
10-12
EVALUATE PROGRAM

This chart is designed to show the interrelationship of all parts of a Career Education Program.

That education should prepare students for a rich, productive, rewarding and purposeful life has long been one of the stated goals of the educational system.

Unfortunately, this goal has not become a reality for many participants in the educational system. Career Education, if used as a major foundation stone in the system, holds the promise of making the goal a reality.

Taken from: CAREER EDUCATION: An Educational Priority for the Seventies. Council of Chief State School Officers, U. S. Department of Health, Education and Welfare.

Part 1

Missouri Career Education Today and Tomorrow

Overview: This part of the Training Workshop Handbook deals with where Missouri is today in terms of Career Education and the direction Career Education will take in the future. It presents a conceptual framework for Career Education and yet it encourages flexibility on the part of local districts to develop their own program.

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    Knowledge of Life Roles, Settings and Events 7
    Academic and Vocational Skills 7

Putting Your District into Career Education 9

Glossary Appendix I-1

Missouri Career Education is on the move! A Career Resource Center has been established at the state level! Grant Award Project recipients have been designated! Career Education Training Workshops are being held! Counselor Training Workshops are being planned! Follow-up Workshops will take place! Training materials have been developed! Projects have received federal funding! A state program is being developed!

Career Education is indeed a viable concept in Missouri. The Grant Award Program has helped Career Education to become a part of the total educational program in many of Missouri's schools. Through the emphasis placed on Career Education in Missouri schools students have been able to develop an understanding of the relationship between what they are doing in school and the world in which they live.

Career Education is not a totally new concept in Missouri. Beginning with the 1973-74 school year, the Missouri Department of Elementary and Secondary Education has funded Career Education Projects through the Grant Award Program. Prior to the implementation of the Grant Award Program, teachers throughout Missouri were involved in Career Education activities in their own classrooms. Though many fine activities were being carried out there was no systematic or sequential school wide planning for all of Career Education.

The Grant Awards were instituted for the purpose

Notes

Career Education action in Missouri

Not totally new

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*Page format is adapted from that of the Maryland State Department of Education's Career Education Resource Notebook.

Notes

Grant Award program

of bringing a nucleus of schools' personnel together at the local level to plan and develop curriculum materials that would provide the basis for a total K-12 program in Career Education.

As a result of this funding many school districts have developed excellent curriculum materials. Even though these materials are in existence at the local level, there has been no systematic planning for their overall implementation and infusion into the total curriculum. Through information gathered from local school and Department of Education personnel it became apparent that there was a need for unified program planning and direction for Grant Award recipients.

Need for unified plan

To alleviate these concerns it was felt that there needed to be a planned program for the State of Missouri that would provide direction and yet be flexible enough for local districts to include their own options in a Career Education program.

Training workshops

In order for local districts to effectively implement and carry out a Career Education Program certain knowledge, skills, and understandings must be developed. To facilitate this development the Department of Elementary and Secondary Education has planned a series of workshops. The workshops are designed with the intent of developing expertise in key individuals who in turn will carry out training at the local level. This handbook contains materials relating to each of the components for an effective Career Education program.

The workshops and materials are the first step in the adoption of an overall state plan for Missouri Career Education. To assist in a comprehensive plan for Missouri it will be necessary to establish a Career Education Advisory Committee at the state level. To better help schools in developing the Career Education program concept it will be necessary to expand Grant Award Guidelines to allow for greater development and implementation procedures.

Missouri Concept of Career Education

Missouri Career Education is seen as a complete educational concept which spans the realm of all educational courses. With this concept, vocational education and academic education are both essential to the totality of one's education. As seen from this frame of reference Career Education does not replace traditional subject areas and neither is it viewed as a separate curriculum or a course offering.

Career Education as a program concept not only embraces all of the academic and vocational subject areas, but it also includes preparation (training) that will help today's youth to prepare for all of life's decisions. A Career Education program will enable the students to understand themselves, become aware of their potential and to be able to relate these to the world around them. The concept of

Notes

Training materials

Missouri state plan

Advisory Committee

Grant Award expansion

Complete educational concept

preparation for life's decisions

Self understanding

Notes

Total person

Goal-setting

Education for life

Career Education is not complete if its prime focus is only on academic and vocational skills--it must include learnings in interpersonal and intrapersonal relationships if our youth are to more fully understand themselves and others. A total Career Education program must focus on the lifespan of individuals--we must consider lifestyles of the future--we must provide educational experiences that are concerned with meeting the needs of today and tomorrow. Career Education, then, includes the teaching of skills, knowledges and understandings that are needed for developing a total lifestyle. It is education for planning and decision making--it is learning to select attainable goals for onesself--it is making plans and decisions, along the educational path toward the achievement of one's goals.

Career Education is a means of making education more personal and a means of bringing together all that youth should learn in order to live a full and productive life. When this type of education is made available to students, education becomes relevant and meaningful. School becomes more than something that students go to and come home from--it becomes a meaningful experience rather than just another activity. Career Education, then, may be thought of as education for life.

Organizing for Learning

Education for living necessitates that individuals gain knowledge, skills and understandings in several broad learning areas. These areas may be defined as: Self Knowledge; Knowledge of Life Planning Skills; Knowledge about Life Roles, Settings and Events and Academic and Vocational Skills. The following paragraphs provide a brief explanation of the learnings in each area. It should be emphasized that there are other groupings around which to organize learnings.

Notes

Self Knowledge

Self Knowledge

Learnings in this area center around individuals learning about themselves, learning about others and learning about interactions between self and others. Concepts in this area emphasize becoming aware and accepting of self and others, and the development of interpersonal skills. Self appraisal and skills for self improvement also are introduced. Through an awareness of personal characteristics--aptitudes, interests, goals, abilities, values and physical traits--growth is begun toward understanding their influence on the person each individual is and can become. Through learnings in this area, individuals become aware of the ways they interact with their environment thus leading to the development of a personal identity. A person who utilizes self knowledge in life career planning and interpersonal relationships and who assumes responsibility for his or her own behavior reflects desired outcomes in this area.

Self appraisal

Responsibility for own behavior

Life Planning Skills

Life Planning Skills

Planning for and making decisions are vital tasks

Notes

Decision making

Values clarification

Influence of planning

Evaluation of decisions

in an individual's life. Every day decisions are made which influence one's life career. Mastery of the decision making skills and the application of these skills to life career planning are central learnings within this area. A preliminary task to effective decision making is the clarification of personal values. The degree of congruence between what one values and the outcome of decisions one makes contributes to personal satisfaction. Individuals learn within this area to identify the steps necessary in making decisions. Included are the skills for gathering and utilizing relevant information. Understanding the influence of planning on one's future and the responsibility one must take for planning are components of the life planning process. Life planning is ongoing. Change and time affect one's planning and decisions. A decision outcome that is satisfactory and appropriate for the present may, with time or change, become unsatisfactory or inappropriate. Thus, the ability to evaluate decisions in view of new information or circumstances is vital. Individuals who are able to clarify personal values, identify steps needed to make personal decisions, gather relevant information and apply decision making skills to their life career plans reflect desirable outcomes in this area.

Knowledge of Life Roles, Settings and Events

Throughout each individual's lifetime she or he will be assuming a number of roles, functioning in a variety of settings and experiencing the effects of many different events. Learnings within this area focus on acquiring an awareness of the various roles, settings and events which interrelate to form one's life career. The roles of family members, citizen, worker and leisure participant, settings such as home, school, community and work, and events such as birthdays, educational milestones, job entry, and job change are identified and examined in terms of their influence on each person's total lifestyle. Learnings in this area include developing a knowledge and understanding of the structure of the education, work and leisure worlds. The interdependency of workers both on and off the job is considered. The individual learns to relate his or her unique personal characteristics and aspirations to specific occupational requirements and characteristics. The effect of change--natural as well as unexpected, social as well as technological, in self as well as in others--is a major learning. As a result of learnings in this area individuals begin to answer the question "Who am I?" through a developing awareness and exploration of the inter-relatedness of roles, settings and events.

Academic and Vocational Skills

The learnings in this area encompass the

Notes

Life roles, settings and events

roles
settings
events

Education, work and leisure worlds

Interdependency

Effect of change

Academic and Vocational skills

Notes

All curriculum areas

Relevancy of education

Occupational preparation

traditional subject matter areas found in most school programs and represent the largest component in terms of amount of content. Basic to an individual's development is the acquisition of knowledge, skill and understanding in curriculum areas such as language arts, mathematics, science, social studies, industrial arts, foreign language, fine arts, vocational-technical education, home economics and health and physical education. The needs of students have changed, presenting a new challenge to educators and education. It is imperative to look at traditional disciplines in terms of relevancy for pupils and the world in which they live and will live. Academic skills must continue to be an important part of the school program and will take on even greater meaning when related to the roles, settings and events of a person's present and future life. In a similar manner, occupational preparation must become a significant part of the educational program of every pupil. Based on learnings in this area, the individual will acquire the academic and vocational skill and knowledge competencies necessary to function in the lifestyle he or she may choose. In addition, they will be able to incorporate a variety of learning opportunities into their daily living and will be able to continuously acquire and refine basic and occupational skills and knowledge throughout their lives.

Career Education is a program of total education designed to maximize human potential through learnings that will enable each person to make effective life decisions.

Notes

Maximize human potential

Putting Your District into Career Education

Missouri Career Education is a planned program that is intended to provide a framework for direction in planning a local Career Education program. While it is a planned program, local school personnel have the option of adding to or deleting from the plan in order to personalize Career Education in their district. The personnel responsible for developing local programs must conceptualize what Career Education will be for their district. In addition to developing a concept of what Career Education is, local personnel must identify a set of statements about Career Education and its expected benefits for students. Once the concept is formulated and a set of statements identified, a framework must be developed. This framework provides the organizer for Career Education learnings.

Local Career Education

Personalize

Organizer for learnings

The remainder of this handbook is designed to help you in the total process of developing a personalized Career Education program at the local level. Appendix I-1 is a glossary of terms that will be helpful to you as you are formulating your plans. For purposes of demonstration and explanation in this

Glossary

Notes

Exemplary areas

Select areas appropriate for local district

publication, the broad learning areas of Self; Life Planning; Life Roles, Settings and Events; and Academic and Vocational Skills will be used throughout. Early in your program planning you will want to identify learning areas that are appropriate for your district's concept of Career Education.

Part 2

Getting Started

The booklet, Guide for Implementing Career Education, is being utilized as the "Getting Started" section for this edition of the Training Handbook. You will find the publication in the inside back cover.

Among the topics covered in this booklet is the committee structure needed to help you successfully implement a Career Education program. In addition to the committees listed, it should be noted that we suggest the organization of two separate task forces which are directly responsible to the Steering Committee. These task forces--one for needs assessment and one for writing goals and objectives--are discussed in later chapters.

Part 3

Determining Needs

Overview: This chapter explains the process of conducting a needs assessment. Included within it are methodology for selecting the sample to be assessed and guidelines for districts wishing to develop their own needs assessment instrument. Also included are suggestions for compiling and interpreting the data.

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    Selecting Content and Items for a Locally Developed Assessment 21
    Collecting the Data 26
    Interpreting the Data (Preliminary Considerations) 27
    Conducting Needs Assessment 29
    Compiling and Interpreting the Data 31
    Disseminating the Results 33

In recent years school personnel have, more than ever before, been challenged by students and the community to be accountable for the learning experiences they provide. Because of this challenge, the process of needs assessment has received a great deal of attention. The Missouri State Department of Elementary and Secondary Education, Guidance Section, has defined need as: "the discrepancy between a student's current status and desired status" (1973). This definition may be expanded to include the discrepancy between the existing program and the program necessary to deliver the desired status of students. Through a needs assessment those involved in program development are able to identify the skills, knowledge and understandings which the various users of educational programs feel are important. A needs assessment is the basis on which program goals, objectives, and ultimately, learning activities are built. As well as providing a basis for new and/or different programs, the results of a needs assessment can be used to evaluate the effectiveness of the current educational program. In this way, evaluation is built into the ongoing process of planning, developing and implementing educational priorities.

Needs assessments may be designed to measure a number of different aspects of the educational program. Gysbers (1974) describes three types of needs assessment that are required in order to form a sound basis

Notes

Challenge to school personnel

Why needs assessment?

Three types

Notes

Format for needs assessment

for program development. He states that the individuals served by the program, the status of the current program and the professional needs of the staff must be assessed. In other words, the following questions should be answered before program development takes place: "What do students, educators, parents and community members see as important educational outcomes?" "Is the current program delivering the desired outcomes?" and "What does the professional staff need in order to produce the desired outcomes?" The answers to these questions will guide educational planners toward a person-centered rather than content-centered curriculum.

The form the needs assessment instrument takes will be dependent upon individual school system resources and needs. Time and people are two major considerations in deciding which format to choose. There are four basic forms--pencil and paper, performance tests, observations and personal interviews. Each of these is discussed in detail beginning on page 18 of this section.

With this brief introduction to needs assessment, let's look now at the steps involved in the needs assessment process. In this, as in other developmental procedures, it is difficult to solve the "which comes first--the chicken or the egg" dilemma. There are often simultaneous activities and it is, therefore, difficult to isolate the flow of the process into a "this step comes first, this one second" pattern. In developing these materials steps have been identified; however, as you begin putting your own needs assessment materials together it may be that it is more logical in your situation to change the procedure. As you read and become more familiar with the process, keep in mind that your local needs and resources will determine the reality of your own needs assessment.

Notes

Steps in Needs Assessment Process

The Career Education Steering Committee will be responsible for coordinating the total needs assessment process. It is recommended that a representative (or representatives) be appointed from the Steering Committee to assume direct responsibility for the needs assessment. This person would serve as convener and coordinator of the Needs Assessment Task Force and report to the Career Education Steering Committee. The following steps are essential to the success of the needs assessment.

Steering Committee member as coordinator

Task Force

Preliminary activities:

Steps

*1. Decide who and what will be assessed and how often.

*2. Gain support for the needs assessment process from the school district's policy makers.

*3. Form a needs assessment task force.

*Note: Steps one, two and three may be carried out by the Career Education Steering Committee, an ad hoc committee or a sub-group of the Steering Committee. The following steps are the responsibility of the Task Force on Career Education Needs Assessment.

Notes

4. Identify population and sample for needs assessment.
5. Decide on assessment instrument to use.
6. Decide how data will be collected and interpreted.
7. Conduct needs assessment.
8. Compile and interpret data.
9. Disseminate results.

Each of these steps will be explained in detail on this and the following pages.

Who and What Will Be Assessed and How Often

Before the support of the district's policy makers can be solicited, some decisions must be made about the basics of the needs assessments. Deciding who will be included in the needs assessment, what will be assessed and how often the assessment should occur will give you an idea of how many people will be involved and approximately how much time will be required.

Who to assess

The question of who is to be assessed is ideally answered with "Anyone that is involved in the educational process...including those responsible for delivering education and those responsible for receiving education." This would include people such as students, educators, parents, community members and employers. Your task is to discover what the users of educational programs view as essential outcomes of those programs. Thus, all of the previously mentioned people should be assessed, however, this may not be feasible in your situation. In that case, an attempt should be made to assess as many of the groups as necessary to yield the information you desire. Following is a brief description of the kind of information you can obtain from each group. Appendix III-1 provides samples of several needs assessment instruments.

Students: This group should receive top priority in any needs assessment. Who knows more about students than students themselves? Students can tell you what they as a group and as individuals need. They can also help you to know whether or not the current program is meeting their needs.

Educators: Assessing this group will give you valuable insight into their perceptions of student needs as well as insight into their own needs in order to effectively deliver specific programs to meet student needs.

Parents: This group will help you to identify what they feel their children should "have" as a result of their school experiences. Including parents in the needs assessment process offers them an opportunity for involvement in planning the curriculum. As a result of their personal involvement, they will be more willing to offer their support of the school program to other parents.

Community Members: Included in this group would be people who are not employers; yet, they support the school financially. Information from this group would give a little different perspective to the same type of information gained from parents.

Employers: Those who are responsible for hiring graduates of your school system or for hiring students still in school have definite ideas of the outcomes they expect. Including employers in the needs assessment process will give the school an opportunity to know what employers expect as well as offering the employers a chance to know more about the school program.

Graduates: An assessment of this group can provide information about the effectiveness of the educational program for those who are applying their skills in post-high school pursuits. They can help program planners identify areas that are of

Notes

What information from each group

Notes

First priority

What to assess

Programs and processes now in effect

Look for things you're assessing already

the most benefit as well as areas that need strengthening.

Students and educators should receive primary focus when deciding who to assess. They are the ones most immediately involved in the educational programs. It may be that for your situation, you will want to consider assessing one or two of the above groups the first year and pick up other groups in following years. It is important that each of these groups be considered at some point in the needs assessment process.

So far we've talked primarily about student outcome assessment--what the consumers of education view as being important for students to be able to do as a result of having been in the schools. It is also important to look at the programs and processes that are now in effect. (It should be noted here that portions of the program and process assessment are included as a part of the instrument used to assess outcome needs.) Assessing programs and processes necessitates looking at such things as space, time allotments, equipment and staff expertise as well as the content of the existing programs. Once again, the extent of what to assess will be dependent upon the resources available to you as well as the breadth of need and how the purpose of assessment is defined. As you're reading through the following list of information to be gained, you're certain to find things you're already assessing. Our point here is that it is important that a systematic and thorough assessment of each of the areas be considered as a part of the total needs assessment procedure. Samples of this type needs assessment are included in Appendix III-2.

Notes

Resource and program assessment

Content of Existing Program: Assessing program content will provide information about the effectiveness of specific school programs.

Space: How is space being utilized? Are classrooms set up so that communication is facilitated? Is there room for educators to prepare for class? Is space efficiently used?

Time Allotments: Analyzing the time teachers and students spend at specific tasks and the overall time division of the total program will give an idea of current priorities.

Equipment/Materials: An updated survey of equipment and materials will help all involved know what is available for them to use. Locating and making equipment and materials easily accessible to users also will be a helpful result of this type survey. In this portion of the assessment an opportunity should be given for staff members to indicate new equipment and/or materials needed.

Staff Expertise: Assessing the expertise of staff members will help those in program planning to know how various staff members may be best utilized. Hobbies and other leisure activities of the staff are an important part of this type assessment.

It is important to keep in mind that program and process needs assessments are for the purpose of assessing what exists at the present time. It is conducted in order to get a factual picture of things as they really are. This needs assessment will yield information useful in bringing desired student outcomes and actual programs into alignment.

First priority

Naturally, in this type assessment the primary focus should be on program content; however, in planning keep in mind that without staff expertise, equip-

Notes

How often to conduct a needs assessment

ment and materials, maximum utilization of space and adequate time allotments the program will fall flat.

Once the who and what of the needs assessment process have been determined it is important to decide how often it should be conducted. In the consideration of how often, the key word is "systematic." The frequency (every year versus every other year) is not so important as is the fact that needs assessments are done on a systematic and regular basis as a part of the ongoing program planning and implementation procedure of the school district.

Ideally, a complete needs assessment would be administered the first year the process is implemented. Ideally and realistically, though, are often two different things. It may be that the first year it is most feasible for your district to assess only three or four areas. This is okay so long as a commitment has been made to assess the other areas at a specified later time. If it is feasible to conduct a full needs assessment the first year, it is not necessary to assess each area every succeeding year. It is important that a plan is developed whereby systematic and regular attention is given to each of the areas. Needless to say, the time span between assessments must be reasonable. Generally speaking, a two year cycle should be considered. This time span will allow an implementation and fair trial period for new programs and yet provide for revamping of ineffective programs before they become stagnant. Program evaluation, then, becomes an integral part of the needs assessment and planning process.

Support of Policy Makers

After the Steering Committee has decided the who, what and how often of the needs assessment process, it is important that they gain the support of the district's policy makers. The policy makers may be administrators or they may be the school board, depending upon the procedure in your school district. The support of the policy makers is essential because they are the ones who have the ultimate responsibility for decisions made within the district. They are also the people who can help get others involved in and committed to the process. Before going to the policy makers, the preliminary decisions discussed in the previous section will have been made. It is essential that a definition and a rationale for needs assessment have been thought through and agreed upon. In other words, there must be a common basis and commitment to needs assessment. The policy makers must be approached knowledgeably and confidently. During the time the Missouri State Department of Elementary and Secondary Education was developing and field testing the "Missouri Student Needs Survey" five benefits of the needs assessment process were identified. These statements may be helpful in the development of the presentation to the policy makers. They are as follows:

Notes

Gaining support of policy makers

Why?

Notes

A needs assessment:

1. identifies needs of students.
2. provides a data base for program development.
3. provides valid and reliable information to policy makers for program support.
4. provides basis for developing more effective teaching techniques.
5. increases opportunity for staff interaction.

This list is by no means a complete listing of the benefits of conducting a needs assessment. It is included to help the working group begin formulating ideas of their own.

Outcomes of meeting with policy makers

The outcomes of the meeting with the policy makers should be:

--A policy statement on the needs assessment process. This statement should include:

the permanency of the needs assessment, i.e., will it become an ongoing part of the program planning cycle?

support for the person who will be responsible for conducting the needs assessment.

the extent of the needs assessment (who, what, how often)

how results will be disseminated and utilized

--A commitment that the process will be supported through such things as extra clerical help and released time (or extra pay) for those administering and interpreting the assessment.

--Specific suggestions from the policy makers about what they would like to see included in the needs assessment.

--A public announcement that the needs assessment will be conducted and that a Task Force will be formed. Included should also be an invitation to community members and school personnel to apply for membership on the Task Force.

The strong support of the policy makers for the needs assessment process is important if it is to be a success. Therefore, careful planning of the procedure to follow to gain this support is essential.

Notes

Needs Assessment Task Force

Task Force

When the policy makers of the district have expressed their support for the Needs Assessment process, it is time to establish a Career Education Needs Assessment Task Force. This Task Force will be responsible for the planning and completion of the needs assessment. It will report to the Career Education Steering Committee through its representative.

Representation

The composition of the Task Force should be representative of each of the groups to be assessed. Thus, the committee will include students, educators, parents, community members, employers and graduates. Even though all groups may not be assessed in the first cycle, it is wise to include all groups on the Task Force so that their input may be utilized from the beginning. The committee should be a mixture of people with varying educational and occupational levels. Be certain to include minorities and to have a male/female balance. If the needs assessment is to accurately reflect the needs of the total school, then the group creating it must be reflective of the total population.

Publicity and selection

Announcement that the committee is being formed should be made public so that everyone has the opportunity to apply for positions on the committee. Having people apply for positions on the committee makes selection for membership a little more special and will,

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therefore, help increase individual's identity with the group. Making membership selection from applications also allows people who might not be thought of as potential members to be considered.

The first criterion for selection should be a willingness on the part of the applicant to become enthusiastically involved. When selecting members, search out those who are supporters of the schools as well as those who are critics of the schools. Getting critics involved in the decision making process often helps them to see a broader view of what happens within the school.

The remaining steps in the needs assessment process are the responsibility of the Needs Assessment Task Force. It is recommended that sub-committees for areas such as data collection and data interpretation be formed so that the burden of the work load may be shared. Some of the steps may be carried out simultaneously and some are dependent upon completion of the preceding steps. It is important that each step be considered before the needs assessment is administered.

Population and sample

Population and Sample Selection

Identifying the population and sample for the needs assessment must be conducted in a scientific way. Careful attention to this process will assure you that the people you choose to assess are truly representative and, as a result, decisions about the population can be based on their responses to the needs assessment.

> In educational settings, a population may be teachers, test items, curriculum materials, students, schools or any number of other things. The population may be limited geographically to one school or it may encompass all twelfth grade girls. Whatever the population, it must be clearly defined...
> (Dayton, 1975)

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Be specific

Saying you're going to assess parents is not specific enough. You must specify which parents, e.g., all parents of school aged children or the parents of high school students. A part of this decision will have been made by the Steering Committee when they decided which groups to assess. The task now is to clearly define exactly what the parameters of the population are.

An ideal situation would be to assess the entire population. This would only be possible in the case of one very small school in a very small isolated community. Time and person power available make this unfeasible and unrealistic in other situations. Since it is generally impossible to assess the entire population of the school community, the next best thing is to select a sample that is representative of the population.

Sample size

There is no set pattern for determining what size sample should be drawn from the population. The following table is an example of the sample size used by the Air Force for certain population sizes.

Notes

Random sampling

Size of Sample Needed for 98%
Precision or Better in 99 Samples
in 100 to Estimate Average Pay
of Air Force Personnel

Total number of units in population	Number in Sample	% of Population
200	105	52.2
500	152	30.4
1000	179	17.9
2000	197	9.8
5000	209	4.2
10000	213	2.1
20000	216	1.1
50000	217	0.4
100000	217	0.2

(Dayton, 1975)

You will note that the sample size increases very little with the great range of population sizes.

Generally speaking, the greater the variability of factors related to the needs assessment, the larger the sample should be. In other words, the more differences there are within the population, the larger the sample; the less differences within the population the smaller the sample. Sampling techniques are as important if not more important than sample size. The sample must be representative to be most useful. The process used to obtain representation is called "random sampling." This technique is one in which (1) every unit (people, places, things) in the population has an equal chance of being selected and (2) the selection of one doesn't effect the chance of the others being selected. If the process of random sampling is ignored, a faulty sample will result and the conclusions drawn from the needs assessment will not be generalizable to the rest of the population.

The two most common ways to obtain a random sample are the lottery method and a table of random numbers (the math teacher is a resource for this). These are the easiest to conduct.

The lottery method is most efficient with small sized groups. In this method, a listing is made of all the "units" in the population and each unit is assigned a consecutive number. Slips of paper containing these numbers are put in a container, thoroughly mixed and then numbers are drawn one at a time. After each number is drawn it is replaced in the container before the next one is drawn. As many slips are drawn as need be to equal the sample size.

The use of a table of random numbers is more highly recommended. In this process the units are numbered serially so that each number has the same amount of digits, e.g., 001, 002..., 075..., 151. The number of digits must correspond with the digits in the population number, e.g., if the population is 570 then there should be 3 digits in each number. Go to a table of random numbers and blindly point to a number any place on the page and read the numbers in a predicted direction, (up, across, down--any way so long as it is predetermined). Read the first three digits (for a population with a three digit number) of each number. If that number is within the range of population numbers, the unit with that number becomes a part of the sample, if not, go on to the next. If a

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Methods

Lottery

Table of random numbers

Notes

Stratified random sampling

number appears twice, also go on to the next (Appendix III-3 is a table of random numbers).

Stratified random sampling is a third method of random sampling. This is a way of assuring that the influence of biasing factors is minimized. The population is divided into significant categories and the random sample drawn from the categories. Dividing a population into male/female categories assures that an equal number of males and an equal number of females will be included in the sample. They could be further divided into groups by race or religious affiliation or color of eyes--any factor which might bias the results.

This method of sampling is a bit more complex than simple random sampling, however, if there are biasing factors present in a population, then this is the best method to use.

In summary, random sampling must be assured if the entire population cannot be assessed. Without the assurance of random sampling, the conclusions and generalizations that can be made are limited to the sample group rather than the population.

Which test instrument?

Choosing an Assessment Instrument

Deciding which assessment instrument to use involves several different considerations. The areas you selected earlier as broad learning areas (e.g., Self; Planning; Roles, Settings and Events; Basic Studies and Occupational Preparation) will be guidelines throughout. In selecting an instrument you must keep in mind the key question "How can we get the most information about needs and programs in the broad learning areas with a reasonable amount of time and effort?"

The first consideration in selecting a needs assessment instrument is whether you want to use one already developed or one you develop yourself. As you may well guess, there are advantages and disadvantages to each way.

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Selecting existing instruments

At first thought it would seem, perhaps, that the best thing to do is to select one of the existing instruments. There are several advantages to selecting an existing instrument. Among these are:

Advantages

1. They are machine scoreable which also provides an information print-out.
2. They are readily available in quantity.
3. Commercially available tests have been field tested.
4. They are often cost-effective when compared with local development and scoring.

Time wise this is the most efficient, but keep in mind what you want to learn from the needs assessment.

Cautions

Dayton (1975) has cautioned against the adoption of an existing instrument for several reasons. Briefly stated they are as follows:

--needs assessment is new, therefore, existing instruments have not undergone rigid tests of effectiveness.

--needs assessments are local in nature--what's right for one locale may not be right for another. Wrong information can be worse than no information.

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--Very few instruments make provision for assessing both present and desired status. One without the other is useless.

From these cautions it should be clear that before choosing to select an instrument that already exists, certain questions should be answered. You want to be sure to select an instrument that you can use rather than one that uses you. Appendix III-4 lists several instruments now in existence.

Developing a local instrument

Developing a local instrument offers many benefits that must be considered in relation to the time factor. In addition to dealing with the above mentioned cautions a locally developed instrument enables school and community personnel to take a comprehensive look at what students, educators, parents, community members and employers have to say about the school programs--both current and desired. It is especially valuable from the standpoint of allowing students an active role in making school programs become more personalized.

Types of format

One of the first things to decide in developing your own instrument is the type format that will be most useful to you. Following are descriptions of the four most commonly used ways of gathering information:

Paper and pencil

1) Paper and pencil - This method requires the respondent to make a written response. These instruments may be standardized or nonstandardized, questionnaires, rating scales, or checklists. They have the advantage of being adaptable to group administration. The respondents reply to specific questions, allowing for easier interpretation.

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Performance tests

2) performance tests - As indicated from the name, this type asks respondents to do something in response to a specific question or situation. The advantage of this type is that it allows for a more personal response. On the other hand it also means that there is greater variability in the responses and in some cases they may be more difficult to interpret.

Observations

3) observations - This type assessment requires trained observers. The persons being observed do not receive any specific instructions. The observer records his or her observations in a specific and predetermined manner.

Interviews

4) interviews - This form requires one to one contact on the part of the person conducting the interview (interviewer) and the person being interviewed (interviewee). The questions may be open ended or more structured in nature. It is important that the interviewer be consistent in his or her methodology to insure fair treatment for all respondents. This is an effective way to get a lot of information and for each involved to be able to clarify his or her response; however, it is time consuming and there is more chance for the data to be contaminated.

There are obvious advantages and disadvantages to each of the techniques. Your own resources will have to be taken into consideration when you are weighing the alternatives. For our purposes, paper and pencil assessments and one type of interview, the card sort, will be discussed in detail.

Paper and pencil formats

Paper and pencil assessments come in a variety of forms. Some allow for great variability in individual responses, while others structure the items and limit responses to yes or no. Some of the pencil and paper forms most frequently used in needs assessment are as follows:

Open ended questions

--Open ended questions: This form allows for individuals to express their personal opinion. They are more time consuming to evaluate and it may be biased by feelings of the evaluator. An example

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of an open ended question is:
"I need to know how to _________."

Multiple choice

--Multiple Choice: This type assessment offers structure and uniformity of responses and yet offers the opportunity for some individuality in response. An example of this type is:
"I need to know how to
_____ a. speak in front of others.
_____ b. tell others how I feel.
_____ c. listen to others more.
_____ d. all of the above."

Ratings

--Ratings: This type is similar to the multiple choice form; however, each respondent has the opportunity to respond to every item according to the way he or she feels. An example is:

Strong Need	Moderate Need	No Need

I need to know how to speak in front of others.

Need Being Met	Need Partially Being Met	Need Not Met

Ranking

--Ranking: This type allows individuals to rank in order of their preference predetermined items. It provides structure and also allows for individuality. An example is:
"I need to know how to:
2 speak in front of others.
3 tell others how I feel.
1 listen to others."

Yes/No questionnaire

--Yes/No Questionnaire: The last type pencil and paper assessment is the yes/no format. This form is highly structured and does not allow for gradations in responses. An example is:
yes no "I need to know how to speak in front of others."

Card sort

Utilizing the card sort method of gathering information enables the user to gain information similar to that obtained in several of the pencil and paper tests. In essence, this is a technique whereby the examiner provides the person being assessed with a set of cards which he or she sorts into a "yes" pile and a "no" pile. This may be extended by having the examinee put the cards in the "yes" pile into a rank order. It might also be used to measure degree of feeling, e.g., strongly agree, agree. This technique allows for clarification of statements as well as responses during the interview.

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Which is best?

It may be that several of these techniques are appropriate for you. For example, if you have a rather small faculty perhaps the interview-card sort might be most effective with them; yet because there are more students a multiple choice format may be more appropriate for them. Once the format is selected you are ready for another big step--the selection of the items.

Selecting Content and Items for Assessment

Content

Content selection must be very closely related to your identified broad learning areas. These areas provide a framework around which you can organize your ideas. Care must be taken to assure that each area is adequately represented by need statements; thus, balance will be maintained within the instrument. When selecting the content for the needs assessment it will be important to brainstorm together about the kinds of things individuals should know or be able to do if they have adequately acquired the learnings in each of the areas. Your list might look something like:

Brainstorming

Learning areas

Self Knowledge
- know abilities
- be self confident
- know how to change
- be able to maintain friendships
- additional outcomes

Planning
- clarify values
- make effective decisions
- make short range plans

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make long range plans
additional outcomes

Roles, Settings and Events

know about a large variety of work roles
know how to match personal characteristics with a variety of jobs
know how to adapt to change
understand the interrelationship of people
additional outcomes

Academic and Vocational Skills

perform basic academic skills
know the relationship of school to the work world
know places other than public schools to learn
know that learning is a life-long process
additional outcomes

Content coverage

As many ideas as possible should be generated. Though you can't cover every aspect in the needs assessment it is important that you be as thorough as possible. The necessity of making an instrument representative of all possible items cannot be emphasized enough.

Developing items

After you have generated a list of learnings in each area, look over the list to see how the outcomes may be grouped together. Many of the items will be able to be put together under a broad goal area. For example, in the list beginning on page 21, two of the outcomes under the area of "Planning" are similar. The two outcomes, "make short range plans" and "make long range plans" could be grouped under one goal area which could be stated, "to learn to make plans."

Developing goal areas

Grouping outcomes into goal areas provides an opportunity to generate more outcomes, thus ensuring a more complete representation of all possible outcomes within a given goal area. You may have stated some of your outcomes in broad terms which can be broken into additional outcomes. For example, "be able to maintain friends" (Self) could be a goal and several specific components such as "know what I value in friendships", "know what others value in friendships" and "know how to choose friends" can be generated from the original statement. When you feel you have generated fairly complete and equal lists of goals and outcomes for each area you are ready to develop the item statements for the Needs Assessment. The key word in writing items is "outcome." Statements should be in student outcome terms--what students should be able to do as a result of the learning program. A statement that says "My teachers are understanding" does not provide much information about students' needs. However, a statement which says "I need to know the things about me that upset others" leads to a specific student need.

Need statements must be a smooth blend between specifying exact situations or conditions and being so general that nobody knows for sure what the statement is saying. In other words, they should be as straightforward as possible and yet be open enough so that everyone can fit himself or herself into the meaning of the statement.

In the process of selecting and developing the items to be utilized the following guidelines will be helpful. They are adapted from the criteria listed by Gysbers (1974) and by Dayton (1975).

--Items must be written so as to be meaningful to students. Not only should the

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Outcome statements

Guidelines for item selection

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language be understandable but also reflect relevance for the students. A needs assessment that ignores contemporary controversial issues does not present the total spectrum.

Guidelines

--Items must relate to important variables. Somewhat similar to the relevance issue, this guideline simply means that the factors measured must be important to learnings for the students.

--Items must encourage responses. Students should feel free to answer all items and should be free of fear of reprisal if their answers reflect negative feelings toward the school. Statements must be written in such a way that each student's answers are the right answers for him or her.

--Items must be stated in outcome terms so that they may be easily translated into student objectives.

--Items must reflect only one variable. If an item includes statements about more than one variable, the respondent may feel one way about one part and another way about the second part.

--Items must be non-leading. This statement means that the item should not lead the student to an answer or a specific pattern of response.

--Items must be within the realm of possibility. If there's no way students can be provided with a carpeted, air conditioned learning environment, they shouldn't be asked if they need it.

Outside "advisors"

As you are developing items it will be helpful to find two or three people who are willing to read and react to the items in terms of clarity and ease of reading. In this way you will be able to revise items as you go along. These people can also serve as "advisors" on the length of the instrument. Often the developers of an instrument, because they have worked so closely with it, have an unrealistic view of the time involved in actually responding to the items.

Once the items have been developed it is important to think about the details of the actual administration of the instrument. Before the instrument will be ready for its first actual administration, you must consider writing the directions, a small pilot test and the major steps of deciding how data will be collected and once it is collected how it will be interpreted.

After item selection, what?

The directions for the survey have a tremendous effect on the results. If the respondents are unclear about the directions, the results of their survey may be invalid. In general, the following guidelines should be used in developing the directions:

Writing directions

--Be brief.

--Be specific. Let respondents know exactly how (circle, check) to mark items, how many responses to mark for each item, and how long and in what form written responses are to be.

--Be fair. If there is a time limit, tell them so. Tell respondents why they are being involved.

--Be consistent. Every person responding to the assessment should be given the same directions so they can respond with the same mind set. This is especially important in the utilization of interview techniques.

After you have written the directions for the items, the next consideration is a pilot test of the instrument. This will help you to smooth out any previously unnoticed "kinks." The pilot test needn't be extensive, but it should include representatives of each population to be assessed, i.e., if students, teachers and employers are to be assessed, then a

Pilot test

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couple of students, teachers and employers should participate in the pilot test. Incorporate their feedback into the process of preparing the instrument for its first administration.

> The steps from this point on are applicable to any type needs assessment whether they be commercially, state or locally developed.

Collecting the data

Collecting the Data

It is important at this point to determine how the data will be collected and tallied. What kind of form will the respondents use to make their responses and how will responses be tallied? These questions are important to work through before the instrument is implemented. If they are not thought through now, it may be that when you begin to compile the results you'll wish you had included something else on the instrument.

Response forms

If the test booklets are to be consumable it is suggested that the respondents mark their answers in them. If nonconsumable booklets are to be used, an answer sheet must be used. Regardless of which response form is used, a code system relating items should be devised and made a part of the response form. For example, if item number 75 relates to Learning Area 1, Goal 3, Self: To be aware of personal characteristics., that should be indicated on the response form. Thus, your form might look like this:

Needs

responses 1. (1.3) Item responses
responses 2. (3.1) Item responses
responses 3. (2.5) Item responses

When you're tallying the results, you can quickly and easily pick out items related to the broad learning areas. (The examples in Appendices III-1, III-5 and III-6 utilize this coding system.)

Tally sheets

The second consideration in deciding how to collect the data is the way in which responses will be tallied. Two types of tally sheets will be needed. The first will provide information about individual respondents' choices, while the second will be used to tally responses of all respondents in each of the broad learning areas. The individual Data Sheet should have a space for each of the items and how they were marked. The items on the Data Sheet should be grouped into the broad learning areas. (Appendix III-5 provides an example of a form of this type.) The group tally sheet for total responses will be very similar, except that space should be included for weighing of the items, which will be discussed in the next section. (Appendix III-6 provides a sample of a group tally sheet.) Regardless of what form of collecting data you choose, it should be a predetermined form and be uniform for each person taking the survey.

Data sheets

Group tally sheet

Interpreting the Data

Data interpretation

It is also important that how the data will be interpreted is decided before the actual administration. After the needs assessment is administered, results

Notes

Problems in interpretation

Decision rules

will be available much sooner and more readily if these decisions have been worked through ahead of time.

There are several ways of interpreting the data. One way is to go through each of the areas for each of the groups and rank the items from high to low in terms of the percentage of people who marked each item as a high need. That's an appropriate procedure to follow if two groups don't rank the same item in opposite ways. For example, students might rank "being able to make effective decisions" a high priority while the employer group might rank it as a very low priority. In this situation a decision must be made as to how the information will be interpreted. Because this or similar situations are likely to occur throughout the interpretation stage, decision rules must be established prior to the administration of the instrument.

Decision rules are rules by which decisions are made. They allow for further control of the data. These rules are predetermined and applied consistently throughout the interpretation of the needs assessment. In making decisions you may always want to choose the plan that will be the most economical or you may want to focus on the desired outcomes of the student population or the parent population. The decision rule you choose must be that which is most effective for your situation. It is important to do two things regarding decision rules:

1. Be consistent!
2. Let others know what your decision rules will be.

One procedure which helps in making decisions is to determine a procedure for weighing items in order that priorities may be set. The following procedure for prioritizing items has been adapted from one used by the Kentucky Division of Guidance Services (1974):

Weighing items

Prioritizing needs

1. After responses have been tallied, circle the twenty items in each area that received the highest tally for each group of people assessed.*
2. Determine agreement between groups
   a. Assign "3" to items checked by all three groups assessed.
   b. Assign a "2" to items checked by two of the groups.
   c. Assign a "1" to items checked by only one group.
3. Determine the discrepancy for each priority in the following way:
   a. "0" if need being met
   b. "1" if need partially met
   c. "2" if need not met
   Multiply the discrepancy score (0,1,2) by the priority score (0,1,2,3). Assign the highest priority to items having the greatest product.

*This information is based on the use of three groups. If more (or less) than three groups are assessed, start with the number of groups and work down, e.g., if four groups are assessed assign a "4" to items which all four groups checked.

This procedure will provide you with a natural place from which to begin developing programs to meet the needs expressed.

Conducting Needs Assessment

Once you have "walked through" the way you will

Notes

be interpreting the data and decide that the format will be effective in the interpretation process as well as the administration process, you are ready to plan for the actual administration of the needs assessment. In planning it will be important to think about several seemingly small but nonetheless necessary details which will help the needs assessment process go smoothly.

Scheduling

Scheduling is one of the first details to be handled. This is where the support of policy makers is essential. It is inevitable that the school schedule will be disrupted somewhat, so it is important to have the aid of those in power when this comes about. Once the schedule (time and place assignments) is known all those involved should be informed.

Recruitment of workers

Recruitment of people who will administer the needs assessment is another step. These people must be given some sort of training to familiarize them with the total procedure. The specific number of people needed will be determined by the extent and type of your assessment. If you are utilizing pencil and paper assessments that may be administered in a group, you will need fewer people than if you are utilizing person to person interview techniques. The people you choose to administer the assessment may be drawn from a variety of sources. School staff is readily available, but consider gaining the involvement of other people such as parents or community members.

Those who are being given the needs assessment must also be given an introduction to the procedure. It may not be possible to bring everyone together into a group. In this case, it will be necessary to develop a written communique explaining why the assessment is being conducted, what will be gained from it, and what their responsibility is in the process. Letting those taking the assessment know these things will help eliminate later problems. They should also know how and when they will be informed of the results.

Along with scheduling and informing those involved of their responsibilities, it is important that a procedure be established for the return of the needs assessment to a central location. A specific time should be established, and someone should be responsible for following through on making sure they are all returned. It is also important that a person be available in a predetermined place to handle any problems that may arise during the administration times. Close attention to these details will help to assure valid results of the needs assessment.

Compiling and Interpreting Data

Once you have gotten this far and have completed all the steps through the administration of the needs assessment instrument, you may think you're ready for a breather. You've certainly earned one, but there's still work to be done--you can't let those neat little stacks containing all that valuable information just

Notes

Informing those who are taking assessment

Return of completed assessments

Someone available

Compilation and interpretation

Notes

lie there. It's time to call in the numbers gang. They're the ones who will be responsible for tying everything together into sets of data from which you may draw conclusions, develop goals and objectives, and plan specific programs.

Detail workers

Compiling and interpreting the data is a complex, but important part of the total process. To help with this task, you will want to have selected a group of people who are known for their careful attention to detail. Here again, the support of the policy makers is essential. If they are truly committed to the needs assessment process, they will help you find people to help with the compilation of data. Even if you have access to a computer, the information must be compiled so that it can be transferred to computer cards. It is not so difficult; it's simply tedious and time consuming. If you have "walked through" the complete process you will have identified the process to follow and your answer sheets and data summary sheets will have been developed to assure the most efficient means of "getting it all together."

Application of decision rules

The decision rules you decided upon earlier will help you to interpret your data. It may be that two groups identified opposite sorts of needs; if you have decided earlier how to weigh and prioritize the items, you will have no trouble analyzing the data. This step should be carried out as soon as possible after the completion of the needs assessment. Those enthusiastic workers and those who were "assessed" will be waiting for the results and the direction school programs will be taking as a result.

Notes

Disseminating the Results

Revealing the results

Informing people of the results of the needs assessment is one of the most vital of all the steps. A number of people have expended a great deal of time and effort in carrying out the total process--it is now important that others be informed of the results of their efforts.

What groups

Several groups must be informed of the specific results of the needs assessment. Certainly all of those who were assessed must be informed of the results. Special effort should be made to get each of these groups together--separately or all at the same time--for an "in-person" revelation of the results. In addition, it would be helpful if the results and what they mean were written up in brief form for the people to peruse at their leisure. The policy makers should be given a report of the results as should all school personnel.

Participants

Policy makers

School personnel

In addition to informing specific groups of the results, it is important that the general school community be informed. This might be done through press releases and Public Service announcements. Community members should be invited to visit the school for a more detailed explanation of the process.

School community

Notes

You now have a bundle of information which you will want to put to use in program development. The following section "Program Direction" will give you some guidelines which will help you to translate the information you now have about needs into direction for school programs.

References

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Guidance Services Division, Guide for Developmental Career Guidance, Frankfort, Kentucky: State Department of Education, 1974.

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Part 4

Program Direction

Overview: This section deals with the development of program direction through the identification of local goals and objectives. A workable way of remembering what goes into the objective writing process is included as a part of this chapter. When developed, these goals and objectives may also be utilized as a part of the program and individual evaluation procedures.

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- Who Writes Goals and Objectives 2

Writing Goals 3
- Guidelines for Writing 4

Objective Writing 6
- Development of Criterion Objectives 7
- Evaluation 11

Conclusion 11

Program Direction

Through the needs assessment process you were able to establish priorities about outcomes for students. The next step is to translate those priorities into statements which will give direction for planning a program to meet stated needs. Developing goals and objectives from need statements will emphasize the close relationship of student needs to the program planning element of the instructional process.

Why Goals and Objectives?

Goals and objectives are an essential part of any complete Career Education program. They form the framework around which the program is developed. Identifying goals and objectives provides a clear picture of the scope and sequence learner activities will follow. Establishing goals and objectives enables learning tasks to be identified in a developmental sequence for each of the age levels. Consistent and systematic program direction and emphasis is possible through the identification of goals and objectives. When these goals and objectives are based on expressed student needs, they provide a vehicle for gaining program support from community members.

In addition to program direction and consistency, the development of goals and objectives provides a basis for ongoing program and student evaluation.

Notes

From needs to programs

Provide framework

Developmental plan

Program support

Program evaluation

Notes

This makes it possible to look at individual students in relationship to themselves and to others as well as [illegible] look at groups of students in relationship to the total program. Evaluation on the basis of locally developed goals and objectives makes the results of the evaluation immediately useful for program improvement.

Who Writes Goals and Objectives?

Groundwork complete

The Needs Assessment Task Force, in cooperation with the Steering Committee, identified broad learning areas around which the needs assessment statements were developed. Within these areas similar ideas were then grouped into goal areas. Priorities were established through responses on the needs assessment instruments. Thus, the groundwork for the goals and objectives writing task has been done.

Goals and objectives Task Force

Even though broad goals have been identified and need statements generated, these have to be drawn into a consistent form and to be made parallel in meaning. This task will best be carried out by a Task Force designated for the purpose of writing the specific goals and objectives for the program.

Membership

The membership on this Task Force will consist of staff personnel. The chairperson should have knowledge of vocational development theory and of goal writing procedures. The members must be representative of all levels K-12. It will be helpful to have people on the Task Force who are familiar with task analysis and with child/youth development.

It is important here to point out the relationship of the elementary school pupil to the total process of program development. Even though you may have decided to conduct a 7-12 needs assessment, the results can be related to elementary school pupils. Because every task or behavior is developmental in nature, a need expressed at the twelfth grade level has a sixth grade and a kindergarten counterpart. Let's look at decision-making as an example. If "I need to decide things easier." received high priority at the twelfth grade level, it is partly due to a lack of systematic instructional attention to the decision-making skill at all levels, K-12. Naturally, a kindergartener will not be able to learn to decide on a course of study to follow; however, he or she can certainly learn to choose effectively between two activities. With a planned program of decision-making skills K-12, twelfth graders are going to be able "to decide things easier." It is, therefore, mandatory that the Goals and Objectives Task Force be representative of all levels, K-12.

Notes

Elementary school pupils

Tasks are developmental K-12

K-12 representation

Writing Goals*

The set of goals you write must be comprehensive and reflect the knowledge, skill and understanding

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*The material in this section is adapted from the *Field Test Version*: Career Planning Support System/ Operation Guidance developed by The Center for Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio.

Notes

necessary for every individual to become all he or she is capable of becoming. The goals developed by the Needs Assessment Task Force will provide the starting point.

Examine goals

Put into words

The first step in the goal writing process is to examine what's been written. Within each area look for overlap between goals. Should one goal be broken into two or more goals? Should several goals be grouped into one? Are there more goals that should be included? Once you have each goal idea clarified, you are ready for the second step--putting that idea into words. When writing goals the following guidelines will be helpful:

Guidelines for goal writing

1. Focus on one broad area at a time so that a mind set can be developed which will facilitate developing a comprehensive set of goals for each area.

2. Make sure that goals reflect outcomes important to each area. Each goal must be worthy of attention in the instructional program.

3. Goals must be stated in student outcome terms. They must reflect a student skill, knowledge or understanding. The goal statement "The student will explore..." does not tell what the student will "be" as a result of learnings. The statement "The student will be familiar with course offerings for second semester" says what the student will be able to do as a result of a process such as "explore" (see also step 5).

4. Goals must reflect the needs of all students. A statement that says "The student will be familiar with entrance requirements for the college of his or her choice" is limited to college bound students. A more encompassing statement would be "The student will be familiar with the entrance requirements for the job or school of his or her choice" reflects a need of all students.

5. Goals must be written in consistent form. (Steps 3 and 5 are similar.) The student is the actor in goal statements. Goal statements identify a result or an outcome. When each statement is stated consistently, objectives are more easily derived from them.

6. Goals must be parallel in meaning. One statement cannot be broader than another, e.g., "The student will identify personal characteristics he or she admires in others" is broader than "The student will identify three ways of expressing feelings." Goals are general statements which indicate a student outcome. From goals, objectives are formulated.

Notes

Appendix IV-1 is a listing of some possible goals for each area.

Ranking

The goals were ranked during the needs assessment process. Your rewriting of the goals should not have affected their ranking. It will be necessary to carefully analyze the priorities in each area to see which of the top ranked goals should be emphasized first. Time and resources will probably make it unrealistic to implement all priorities at once. When deciding which goals to implement, you will want to consider all you have available--resources; time; budget. When goals are selected for further development and implementation it is important that a public statement be made telling why the goals were selected. This helps to keep all involved informed and may alleviate later problems with someone who says "But I thought basket weaving received top priority--why aren't you doing that?"

Public statement

Notes

Behavioral objectives: expectations of all involved

Evaluation

Two types of objectives

Criterion

Enabling (helping)

Objective Writing*

Note: Appendices IV-2, IV-3 and IV-4 will be helpful to you as you go through this section. It is recommended that you familiarize yourself with them before you work with this portion of the Handbook.

Once the goals for implementation have been selected it is time to begin the process of writing behavioral objectives. These objectives are what will let others know exactly what is expected of students, teachers, administrators, parents and anyone else who is involved in the Career Education program. They communicate exactly what the outcomes of the program will be. Evaluation may be based on the objectives because they state specific measurable results.

Two types of objectives are written for each goal. The first type, called criterion objectives, are stated in student outcome terms, e.g., "The student will identify three schools in which he or she is interested." The second type, called enabling objectives, may be stated in terms of the person who will be helping students reach their objectives, e.g., "The librarian will provide the student with catalogues or other information about schools in which he or she may obtain training in the occupation of his or her choice." An enabling objective provides the opportunity for students to reach a criterion objective. It is through enabling objectives that activities are developed.

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*The material in this section is adapted form the Field Test Version: Career Planning Support System/ Operation Guidance developed by The Center for Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio.

Development of Criterion Objectives

Our first consideration will be the development of criterion objectives, K-12, for each of the selected goals. Many of the student outcomes have been identified through the needs statements. During this phase those need statements will be expanded upon to provide student outcomes which will lead to the goal.

Using the priority goals and the process of brainstorming you will generate a group of ideas for behavioral criterion objectives. The following steps should be followed:

1. Become familiar with the brainstorming process (see page 18 of the "Plan to Action" section).

   Practice the brainstorming process by brainstorming the following topics for a very brief time (1-2 minutes)
   How many ways can you use a pencil?
   Your group has $100, how should it be spent?

Note: Steps 2 through 10 should be done in grade level groups. That is, K-3 staff should be in one group, 4-6 in another, 7-9 in another and 10-12 in another. If there are not sufficient people for four groups, divide into two--one a K-6 group and the other a 7-12 group.

2. Write one of the goal statements on the board or a large sheet of paper.

   Under the statement write the following headings:

   ACTORS BEHAVIORS CONDITIONS DEGREE

   (For criterion objectives the student is always the actor.)

Notes

Expand need statements

Steps to developing criterion objectives

Practice brainstorming

Write goals so all can see

Notes

3. Use the goal as the brainstorming stimulator to identifying behaviors or tasks the student could perform to demonstrate he or she attained the goal. Ask questions like:

    A. What types of knowledge, skills or understanding will students demonstrate to show achievement of this goal? (For example, recall facts, show interest, accept responsibility.) Try to specify behaviors at various levels of difficulty.

    B. What tasks could the student perform to show he or she has these knowledges, skills and understandings. (For example, recall the names of occupations in different occupational groups, rate an occupational cluster high on an interest inventory.)

    Record all suggestions mentioned during brainstorming under the "BEHAVIORS" heading.

    Allow six minutes.

Discuss ideas

4. Discuss ideas presented in terms of their importance and relationship to goal. Compare list of prioritized need statements. On the listing star (*) any that are on the needs list. If all of ideas from need statements are not included on the list, add them.

Select most appropriate

5. Select by consensus the behaviors that are most important to the meeting of the goal. Watch for similarity and overlap between items. Cross off items not selected.

Brainstorm conditions

6. Brainstorm conditions for criterion objectives using goal statement and behaviors you selected in (5). The following questions may be helpful:

    A. What materials or information should the students be given to accomplish each behavior? (A list of local employers? Current information about the job market?")

    B. Where is a good setting to evaluate the students' behaviors? (On a field trip? During a free reading session? After a film on occupations?)

Discuss conditions

7. Discuss the conditions and match them to behavior statements when appropriate.

NOTE: THE CONDITION STATEMENT IS OPTIONAL IN A CRITERION OBJECTIVE.

Cross out all conditions not matched to behaviors.

8. Brainstorm degree of success necessary for criterion objectives using the goal statement, behaviors and conditions. The following questions are starters:

   A. How can the degree of success for the students' attainment of the behavior be measured? (Set a time limit? Specify the minimum number of correct responses? Describe the behavior or task in detailed steps? Describe with adjectives how well each actor must perform?)

   B. What phrases can be used to specify degree of success? (Without error? Correctly? Accurately? To the satisfaction of advisor and/or students?)

   Record all suggestions under "DEGREE" column.

   Allow six minutes.

9. Discuss each statement and match with appropriate behavior and condition statements.

   Cross out all degree statements not used.

10. Each member of the group then takes one or more of the "ABCD" sets and writes a criterion objective for each one.

NOTE: All groups (K-12) should come back together and work as a total group from this point on.

11. Elementary and secondary groups share criterion objectives with each other. It is helpful to have the behavioral objectives written on large sheets of paper so everyone can see them.

12. Evaluate and refine behavioral objectives by looking at each one critically in the following terms:

    A. Recommend to accept a criterion objective if you feel it meets all the following conditions:

       1. Indicates behaviors that are important for students to achieve

       2. Is stated in clear, easily understood terms

Notes

Brainstorm degree of success

Discuss degree of success

Write

Share

Refine

Notes

3. Is logically derived from the goal

4. Describes student outcomes and not processes for achieving outcomes

5. Follows the ABCD rule (has four parts: actors, behavior, condition (if appropriate), and degree of success)

B. Recommend to revise a criterion objective if you feel it describes important student behaviors but:

1. Could be stated more clearly

2. Does not follow the ABCD rule or part(s) of the objective need improving

3. Is not logically derived from the goal

4. Describes a process rather than an outcome

C. Recommend to reject a criterion objective if you feel it:

1. Does not specify important behavioral outcomes

2. Specifies adult rather than student actors (Operation Guidance, p. 15)

Revise

13. Revise any objectives that need revising.

Review

14. Review all the criterion objectives for the following points:

A. Is there a sufficient number of criterion objectives to define goal?

B. Can an evaluation be drawn from each one?

C. Are there any criterion objectives that are superfluous or repetitive?

Nucleus of action plan

The criterion objectives you have written form the nucleus for the Career Education program you are about to put into action. From the criterion objectives, teachers will develop enabling or helping objectives and from these activities will be put into action in the classroom. You will be on your way to the full implementation of a needs based program. The next chapter will deal with ways of organizing for teaching. You will be able to use the ideas presented as springboards for your own creativity.

Notes

Evaluation

Program and individual evaluation

The criterion objectives are stated in specific observable and measurable terms. This will enable you to utilize these objectives in program and individual evaluation.

For program evaluation you will look at the number of students attaining the objectives at each level. If a sufficient number are not meeting the objectives, it will necessitate analyzing the program to see why they are not. In this way changes can be made as you go along.

Individual evaluation may be conducted by looking at each individual to see whether he or she is meeting a sufficient number of objectives. If not, why not? Is the problem with the individual or with the program for the individual? Is the objective a realistic one for this particular person? Through these questions the program can be modified to more nearly meet the needs of all individuals.

Conclusion

Conclusion

Careful attention to the four parts--Actor, Behavior, Condition, Degree of success (ABCD)--will lead to program direction that will communicate to all

Notes

involved in education what their school "is all about." It will provide a basis for evaluation. Most importantly, it will be a program based on the expressed needs of students.

Reference

Operation Guidance field test version behavioral objectives procedural guide for the behavioral objectives task force. Columbus, Ohio: The Center for Vocational Education, 1974.

Notes

Part 5

From Plan to Action
The Infusion Process

Overview: This part of the Training Handbook tells how teaching strategies may be organized for classroom implementation. Processes which provide the tying together element for all activities are discussed. Included in this section are also ideas for specific activities which can be organized in a variety of ways. As you are reading, keep your district's goals and objectives in mind. They will give you a personalized organizer for the activities and processes.

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Once you have the direction for your program that goals and objectives give, it is time to add the activities that will provide the vehicle for getting to the goals. There are many ways of putting Career Education into the total school program. For some people the step from little Career Education to big Career Education may be quite easy, while for others it may be most difficult. When overall plans for involvement are being created differences in people should be considered and viewed as being realistic rather than negativistic.

As has been mentioned before, a look around the school will reveal that a lot of what we're talking about is already taking place. It is important that all those involved know that Career Education is not something entirely new. What's new about Career Education is its renewed focus on processes to deliver content learning and a centering on people and their lives.

The Career Education Committee in Sullivan, Missouri entitled their 1974 Grant Award product "Career Education--A Way of Teaching". This very clearly defines the role of Career Education in the total curriculum. It is not something separate or apart from the existing curriculum, but is an integral and ongoing part of it.

The steps to "Career Education--A Way of Teaching" must be steps that everyone should be able to reach.

Notes

Infusion process

People differences

Not entirely new

A way of teaching

Notes

Small step

Better to have small steps that most people can reach than big steps that only a few can reach. One of the first things to do in helping teachers infuse Career Education into their everyday teaching plans is to identify things people are already doing that incorporate Career Education ideas. Who has invited someone to serve as a classroom speaker recently? Who has taken a field trip. Who has started a class money-making venture? Who teaches a skill that people use in their lives? Where people are right now is the place to start. Each of these activities can be related to one of your Career Education objectives and it is important for people to know that. Focusing on things that people are already doing will help each person to see where he or she fits into the Career Education picture and give him or her encouragement to try some new ideas to expand the already existing Career Education activities.

What's already happening?

Underlying processes

There are several processes and techniques that may be utilized to varying degrees at all levels. These processes are designed to help students gain the effectiveness they need in order to become all they are capable of becoming. They underlie any successful Career Education program. Beginning on page 5 several of these processes are discussed briefly. References for those interested in further exploration will be listed. The processes discussed will be: Classroom Atmosphere; Discussion Groups;

Brainstorming and Consensus Formation; Role Playing; Values Clarification; World of Work Exploration, including Interviews and Field Trips, Resource Persons in Classroom and Student-planned Presentations.

Notes

Activities

Organizing activities

Processes are essential to a successful Career Education program, but obviously they are not enough--there must be activities to go along with the processes. There are a variety of ways to set up a plan for the activities within the classroom. One way is to organize activities around the subject matter you are presently teaching, e.g., if you are teaching about fractions in the sixth grade or the circumference of a circle in Algebra you can have pupils temporarily assume the role of a sewing worker and measure cloth or decide how much fringe they'll need to go around a round table cloth. A second way of planning activities is to organize around the goals and objectives and relate subject matter to these. For example if the objective is "For learner to identify five of his or her personal characteristics" you might think of ways of relating this to math (measuring height, weight), art (self portrait), or social studies (similarities and differences of people). A third way of organizing is to choose a person, place or thing and plan a big unit which centers on the "idea." A fourth way of organizing is to plan separate activities related to goals and objectives but not necessarily to a skill being taught at the present time. Beginning on page

Notes

53 are further examples of each of these ways of planning activities.

PROCESSES

Notes

Classroom Atmosphere

For Career Education to become a consistent way of teaching, it is important that regular and systematic attention be given to the kind of atmosphere that exists within the classroom. In order to help each student to grow into all he or she is capable of becoming it is important that each person has the opportunity to learn in an environment that is conducive to such growth. It must be an environment where each person feels secure with his or her own uniqueness, an environment where mistakes are opportunities to learn more and where cooperation among all members is more important than competition among a few. It is a place where mutual respect between teacher and student exists. This means that each will believe in the worth and ability of the other and that each will respect the other's needs.

Learning environment

Mutual respect

To start the process of developing a systematic plan toward a classroom atmosphere in which all will thrive (including yourself), take an honest look at "what is" right now. How can that be improved? Start with one small step and keep adding until you have the environment you each choose--then add some more to make it a classroom environment you never dreamed possible. If you say "It's OK now!" then you better take another look--it can always be made better!!

Look at self

A word of caution is due here...this is not a week long or even a month long task. It is a task

Notes

Ongoing task

that, if done correctly, will never be complete. As people change, so must environments change. Nor is it a task that will be completed without backsliding. Expect some days when you forget all about equality in the classroom and have a need to make all the decisions or when the students forget you're a human being, too, and begin to treat you like a teacher including all the hassels and power struggles. The important thing to remember is that you and they have alternatives to this way of reacting in the classroom--you can start where you left off and try over. Knowing that one mistake doesn't make a failure is important for each of you to remember.

The following activities are taken from Career Education Methods and Processes (Gysbers, 1974) and are ideas you can use to start more ideas flowing. Be brave--try lots and often.

Ideas for growth

1. Identify things you can do each day to tell every student he or she is important to you. Things like:
    - personal comments ("How's your sister?" "I saw your mom last night." "I like your new dress.")
    - touch
    - a special note on a returned paper
    - a personal smile or wink
2. Let your students know your plans for growing. Work together to each become more loving, accepting, understanding.
3. Set aside listening times. With a group of 2 or 3 students, share with each other thoughts about anything--remember that at first it may be difficult for pupils to talk with you about their thoughts. Talk first with whole class about the listening times. Be sure you share your own personal thoughts and not

your evaluation of their thoughts.

4. Remember: Readiness is not reserved for beginning reading. Anything new or different requires a readiness period--sharing one's self--being real is no different. It may take you all a while to get ready.

5. For a few minutes each day, pretend that you're not a teacher. Interact with students as a person--a person who has experienced joy, fear, sorrow, anger. Stretch the time 'til it's all day (or for as long as you as a person can).

6. Provide times when pupils can just talk--in small groups, large groups, one large group. Join them.

7. Listen to what your pupils are saying--don't evaluate; just listen, accept and understand.

8. Be cognizant of the proportion of competitive versus cooperative projects and activities in your room. There should be at least as many cooperative as competitive activities.

9. Arrange your room so that interaction is promoted rather than deterred.

10. Think about your own movement in the classroom--does every person have a chance to feel physically close to you frequently--or is that reserved for those in the front of the room.

11. Remember: It's difficult for students to see the application of today to tomorrow--they're looking for success today.

12. Give students opportunities for making decisions and taking responsibility for the consequences of their decisions.

13. Give students opportunities to assume responsibility for what they learn or study.

14. Listen.

15. Provide frequent opportunities for students to ask you questions. When you're on the "hot seat" students will under-

Notes

More ideas

Notes

And more ideas

stand that you may "pass" on questions that are too personal.

16. Provide frequent opportunities for students (and you) to ask other pupils questions. When a pupil is on the "hot seat" the other students (and you) will understand that he or she may "pass" on questions that are too personal.

17. Each of you put your name in a box and then draw a name out of the box. You each design a poster advertising the positive characteristics about the person whose name you drew. Display the posters.

18. Every once in a while ask an opinion question that doesn't have a right or wrong answer. Ask questions like "How many of you like baseball?" or "Should everyone eligible, vote?" Keep track of the questions and tally the results. After you've asked several, have students ask own questions and tally results.

19. Participate in students' activities as much as possible.

20. Frequently point out specific things they do as a class that you like...tell them how it makes you feel.

21. Be consistent.

22. Think of the student or students you and the rest of the students have the most difficulty loving, accepting and understanding. What can you do right now, today, this very minute to make her or his life happier? Do it! What else can you do? Do it, too! Keep thinking! Keep doing!

23. Put yourself in the farthest away seat, how do you feel? Are you comfortable? Do you feel close to the teacher (mentally and/or physically)? Can you see? Can you hear? Do you feel a part of the rest of the class?

24. Read Will the real teacher please stand up? and I See a Child. Read them again and listen! (See Bibliography)

25. Talk with a student without asking questions...not even one. Tell him or her what you're doing...he or she will probably giggle and you'll find it difficult. But try...and then try again with someone else. (pp. 23-25)

Work together with your students toward creating the kind of an atmosphere that will maximize growth for all. Together you can make it.

Notes

For additional ideas about classroom atmosphere see any of the following references:

Brown, G. Human teaching for human learning. New York: The Viking Press, 1971.

Glasser, W. Schools without failure. New York: Harper and Row, 1969.

Greer, M. & Rubinstein, B. Will the real teacher please stand up? Pacific Palisades, California: Goodyear Publishing Company, Inc., 1972.

Gysbers, N. Career education methods and processes. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1974.

Harmin, M. & Gregory, T. Teaching is... Palo Alto: Science Research Associates, Inc., 1974.

Herbert, C. I see a child. Garden City, New York: Anchor Press/Doubleday and Company, Inc., 1974.

Leeper, R. R. (ed.). Humanizing education: The person in the process. Washington, D. C.: National Education Association, 1967.

Classroom Discussion Groups*

Notes

Discussion groups

Sharing information and experiences is an important part of the life of every student. Being able to talk with others enables individuals to have a greater understanding of each other and in turn a greater understanding of themselves. Being able to listen and to be listened to gives individuals a chance to learn about their own self-worth. Finding one's place in the midst of all the interference of daily classroom activity is often difficult. Being able to hear "Hey, that's a great idea!" or "I'd never thought of it that way" after expressing a personal thought gives people the opportunity to evaluate themselves in a positive way.

Self-worth

The classroom provides an ideal place for these kinds of opportunities to occur. In the class, discussions take place frequently. A look at these discussions will reveal that they are generally one way in nature--the teacher asks the questions and the student answers. If a second student is involved it is usually through the teacher. The structure of the classroom and the number of students in each class often preclude every student having an opportunity to express his or her own opinions. This is especially true in large groups. The individual value of sharing ideas is so important that alternative ways must be

One-way discussions

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*Adapted from: Gysbers, N. C., Career education methods and processes. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1974.

Notes

sought for providing real classroom discussions in which everyone has an opportunity to hear and be heard, to agree and be agreed with, to challenge and be challenged. One alternative is small group discussions.

Benefits of small discussions

Through structured small group discussions, students can have a safe environment in which to begin understanding and being understood. They will be able to try out new behaviors and to share personal concerns. Feedback from peers about effective/ineffective behaviors is an outcome of people getting together in small groups. Working in groups is an efficient way of sharing information. Small groups foster independence while developing cooperation.

Readiness for small group discussions

Getting started in small group discussion activities can be a frightening experience..especially for primary grade teachers. Yet it is possible to develop discussion skill at all levels. The level of complexity, of course, will vary, but it is possible to have kindergarteners as well as twelfth graders discuss topics or ideas in groups. Readiness is a key. If on December 2nd a group of 30 kindergarteners is divided into groups and told to discuss the meaning of Christmas, small group discussions will surely fail. If on the other hand this same group of kindergarteners is given adequate preparation before being divided into groups and then given a specific task to carry out, they will be on the road to developing skills in discussion. Readiness is not limited to primary aged students. If a group of twelfth graders have never participated in small group discussions, they, too, will find it difficult and will need a readiness period.

The following guidelines will help you through the readiness period:

--An atmosphere of trust must be a part of the classroom environment before people are able to share openly.

--Have a clear idea of the basic purposes which will underlie every group meeting, regardless of the topic for discussion. In other words, "What do you and students hope to gain as people as a result of having worked in groups?"

--Students must know what your role and their roles will be in the discussion groups. Generally, you are a coordinator and they are responsible for all that goes on in the group. By allowing them to assume the responsibility for the functioning of the group you are helping to create independence and problem solving skills within the students.

--"If at first you don't succeed, try, try again." It will not be easy at first, but keep trying. Group discussion requires skill and that means practice.

Putting groups into action in the classroom requires thinking through three basic questions. They are:

What size should the groups be?
The answer to this will depend upon your needs. Smaller groups (3-4) allow for more individual sharing. Larger groups (8-10) allow for greater variability of ideas. Generally, a group of five is a desireable size. This allows for a blend of everyone participating and a variety of ideas.

Notes

Readiness guidelines

Groups into action

Notes

Assigning people to groups

How should people be assigned to groups?

The best way to assign people to groups is through sociometrics.* Group members must want to work together. The following guidelines should be followed if sociometric information is not available:

1. Put compatible people together.
2. Put isolates in groups where they are accepted by at least one person.
3. Have at least two members of the same sex in each group, although it's not necessary to have an equal number of males and females.
4. Have students with varying abilities in each group.

Classroom arrangement

How should the classroom be arranged?

Within each small group each person should be able to see everyone else. There should be enough space between groups so that the distractions are kept at a minimum.

Student preparation

Preparation of students for group participation is vital to the success of classroom discussions. It is important that they know something of what groups are and why they function. They must possess skills of listening, self-expression, critical thinking and empathic understanding. They must know what's expected of them. Not everyone will develop group discussion skills at the same rate. Those students who are secure in their place with their peer group will find it easier to participate in group discussions than will those who are still searching. Understanding and helpful encouragement on the part of everyone will make participation easier for these people.

A sociometric service

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*A complete sociometric service is provided by the University of Missouri-Columbia for a nominal fee (approximately $10.00 for an average sized class). For more information write to: Dr. Irvin W. Cockriel, 101 Hill Hall, UM-C, Columbia, Missouri 65201.

There are no prescriptions which guarantee that discussions will be successful. Because groups consist of people, they each are a little different. Though this is true, there are some ideas and hints which will help students get started applying their skills to the ongoing group discussion process. A few of these are:

Notes

Ideas and hints

--educator and students must have a "we" feeling... each must feel they are in the learning process together.

--in the beginning topics should not be too "heavy", e.g., deal with deep personal feelings; rather they should deal with topics such as favorite activities or weekend plans.

--use open-ended sentences or brainstorming as "warm-ups".

--feel free to talk about the group atmosphere together.

--define the purpose of any group discussion.

--link thoughts and ideas of participants.

--summarize discussion a few minutes before termination.

Caring, understanding and accepting classroom discussions, either in small groups or as one large group, can be exciting experiences for both educators and students. The beginnings are not easy--for either pupils or educators. Through continued personal involvement in the process, educators and pupils alike will develop their skills and the outcome will be enriching for all!

Keep trying

Special Note: Many of the ideas contained within this section are a result of personal conversations with Sandra W. Gautt, Department of Special Education, University of Missouri-Columbia and the

Notes

utilization of the "Social Interaction Skills Program" co-developed by Ms. Gautt, Maurine Kukic, U. S. Office of Education and Cheri Howard, University of Missouri-Columbia. The "SIS" Program was sponsored by Project PRIME through a U. S. Office of Education grant.

For additional reading in this area see any of the following resources:

Anderson, J. L., et. al. *Focus on self-development, stage one: Awareness*, Chicago: Science Research Associates, 1970. (see especially pp. 148-173)

Dinkmeyer, D. *Developing understanding of self and others, D-1 manual*, Circle Pines, Minnesota: American Guidance Service, Inc., 1970.

Flynn, E. W. & LaFaso, J. F. *Group discussion as learning process: A sourcebook*. New York: Paulist Press, 1972.

Gronlund, N. E. *Sociometry in the classroom*. New York: Harper and Row, 1959.

Gysbers, N. C. *Career education methods and processes*. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1974.

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Notes

Notes

Mutual decision making/problem solving

Steps in problem solving process

Brainstorming and Consensus Formation as Classroom Techniques

Brainstorming and consensus formation are vital processes in mutual decision making/problem solving. Brainstorming leads into the process of consensus formation. Without consensus formation the process of brainstorming does only half the job--no decision is reached. The combined processes of brainstorming and consensus formation are very similar to the steps John Dewey utilized in applying the scientific method to individual problem solving (Lavatelli, Moore, Kaltsounis, 1972). In his process the individual must:

1. know a problem exists
2. search for a solution
3. form a hypothesis about the best solution
4. confirm or refute hypothesis
5. if hypothesis is rejected, generate more hypotheses

Thomas Gordon (1970) expanded on Dewey's work and developed a six step procedure for "No-lose" problem solving. His six steps are:

Step 1. Identifying and defining the conflict
Step 2. Generating possible alternative solutions
Step 3. Evaluating the alternative solutions
Step 4. Deciding on the best acceptable solution
Step 5. Working out ways of implementing the solution
Step 6. Following up to evaluate how it worked (p. 237)

Although Gordon utilizes the procedure as a conflict resolution technique, the procedure can be adapted for use in group decision making techniques.

In this section, brainstorming,which encompasses the first two steps of Gordon's procedure, will be discussed first. This will be followed by a discussion of the process of consensus formation which parallels the third, fourth and fifth steps of the mutual problem solving method. Finally, follow-up procedures which correspond with the sixth step in problem solving will be discussed.

Notes

Brainstorming

Brainstorming

One of the most effective ways of generating ideas in a group is brainstorming. As a classroom technique it is no less effective and can have unique benefits for the students who are involved in the process. It can expand creative thinking as well as assist in developing self-valuing of personal ideas. Brainstorming is a non-threatening way of developing acceptance of other's ideas. It allows individuals to gain confidence in expressing themselves before a group. It can be used to create solutions to a problem of conflict or it can be used to generate ideas for making decisions. It can be used by two people (maybe even one) or it may be used by a group of twenty or more.

Benefits

Outcomes

Through the technique of brainstorming it is likely that the most brilliant of ideas will develop. It allows for ideas of all sorts to be explored. The seed that one person plants can grow into a full-blown idea through brainstorming. Through brainstorming, ideas that are truly effective and some

Notes

Group cooperation

Brainstorming is a skill

Foundation for brainstorming

that aren't so effective have a chance for exploration.

As well as being effective for individual human growth and for the generation of ideas, brainstorming is a way to develop a sense of cooperation among the group. In brainstorming the focus is on the solution of the situation or problem at hand, rather than on the competitiveness of the individuals involved. It is a way of creating an openness with others and a freedom of thought within the group.

Brainstorming, while a process, is also a skill and like any other skill must be developed. It is not always easy for students who are first becoming involved in the process to be free with verbalizing their ideas. Practice is mandatory to help each participant become skilled at the brainstorming process. The misconception that groups can't make decisions is a result of people in groups not practicing the skill before a major decision is to be made. Appendix V-1 provides a list of topics that are good practice ideas for brainstorming.

The mutual problem solving/decision making process is based on five basic ideas which must be accepted as truths before the process can be successful. These are:

1. When a problem or decision is presented to the group there is no predetermined solution--the sky's the limit as far as possible outcomes are concerned.
2. What's right for one group may not be right for another group. Two groups may brainstorm the same topic and each come up with a

different outcome--an outcome may be right for one but not right for the other.

3. A decision made mutually is more likely to be carried out than one in which only one person has a part.
4. A group made decision or solution is better than one made by only one person. Many ideas can be explored to be sure that the best of all decisions or solutions has been made.
5. A mutually made decision or solution will require less reinforcement or fewer reminders in the implementation process.

Success in brainstorming requires rigid adherence to several ground rules. They should be gone over thoroughly when the process is introduced and reviewed each time it is used. It would be helpful to make a big chart stating the ground rules; it is wise to have the rules visible to all during each brainstorming session. The ground rules for generating ideas are:

1. Evaluation is taboo. This means no positive or negative evaluation. Saying "That's a great idea!" or "Uh huh!" can be as inhibiting to some group members as "That'll never work!" can be to others. Acceptance and respect for all start here.
2. All ideas are accepted. In brainstorming every idea is included. Encourage a free thinking atmosphere and along with this encourage wild and creative ideas. This is where innovative solutions are born.
3. Aim for a million. Quantity of ideas is the key in brainstorming. In the brainstorming process quality is not mentioned and quantity is emphasized. The more ideas, the better. This encourages participation without the fear of failure.
4. Expand on others' ideas. Participants should feel free to use another person's ideas as seeds for their own ideas. Often when one person says something it triggers an idea in another's mind. This mutual sharing should be encouraged. In addition to generating more

Notes

Ground rules

Notes

ideas, it is also a place where cooperation and collaboration among class members begins.

5. Write every idea down. Writing each idea down not only serves as a reminder of what's been said, but also shows acceptance of every idea as worthy of consideration. The recorder must write the ideas as closely as possible to what the contributor said. No interjection of the recorder's feelings. A large sheet of paper and a porous-tipped pen are valuable resources here. Writing ideas so that all can see helps to maintain involvement.

6. Set a time limit. Five to ten minutes is ample time for most topics. Once the time limit has been established stick to it. Working in competition with the clock will help people focus on quantity rather than quality. A kitchen timer is an effective tool to use. Using a timer frees the coordinator to oversee the process and to help people adhere to the ground rules.

7. Hand raising is out. To maintain the free flow of ideas handraising and "calling on people" are out. It is often effective if the recorder does not even look at the group but just "stands ready" to write as ideas flow.

Practice

It won't be easy at first. Group members will be tempted to smile, frown or make comments as ideas are presented. They will be reluctant to contribute half-developed ideas. Recorders will be tempted to say "Do you mean?" when someone contributes an idea they don't understand or with which they don't agree. Practice with the topics in Appendix V-1 will facilitate the strengthening of the skill.

Consensus Formation

Consensus formation

The process of consensus formation is a logical follow-through for the process of brainstorming. Through brainstorming ideas are generated. Through consensus formation decisions about the ideas generated are made. This process is similar to the third and fourth steps in Gordon's (1974) process of problem solving. It is here that evaluation enters the picture and quality becomes important. The ideas generated through brainstorming are evaluated and the best one is selected for implementation. The following procedure for consensus formation is adapted from Gordon's work (1970, 1974).

Gordon (1974) has identified seven helpful guidelines to follow during the evaluation process. They are as follows:

a. Start the evaluation process with another open-ended question--e.g., "What do you think about each of these ideas? Which are the best?"

b. Cross off the list any solution that produces a negative rating from anyone for whatever reason.

c. Use a lot of active listening to be sure that all participants accurately understand the opinions and feelings expressed....

d. Do not hesitate to state your own opinions and preferences. Do not permit a solution to stand if it is not really acceptable to you.

e. Use I-messages to state your feelings--e.g., "I couldn't accept that idea because..." or "I don't feel comfortable with that solution because..."

f. Now is the time for documentation and analysis. Encourage participants to advocate their proposals, to tell the group why their ideas have merit. You can argue the case for your favorite solutions, too!

Notes

Evaluation of ideas

Guidelines for evaluation

Notes

> g. Do not rush! Unless it is obvious that everyone agrees to one solution, take the time to let everyone have his (or her) say. If some of the participants have not spoken, encourage them with an I-message--e.g., I haven't heard from everyone and I'm curious about all our feelings. (p. 231)

Communicate acceptance

In the early stages of learning this process students may be on the lookout for signs of authoritarian decision making. Take special care at first that you communicate acceptance to each person. When you express your opinion, follow the suggestion in "e" to be sure that students know your feelings.

Final decision

When the list of solutions has been evaluated it may be that one best solution has naturally evolved. If this is the case, you're ready to decide how to implement the solution. If several ideas remain as seeming to be equally effective then additional discussion must take place.

No voting

At this stage it will be tempting to say something like "We've got three pretty good ideas here--let's vote on the one we want to choose." VOTING IS TABOO! Someone always loses when a vote is taken. This diminishes commitment to the final decision--in fact, it may even mean that someone will sabotage the success of the implementation process. If you can't vote, what can you do? The following ideas from Gordon (1974) will help move the group toward successful consensus formation:

Moving toward consensus

> Test the proposed solutions. Ask students to imagine how each solution would work if it were chosen. "If we tried this idea what do

> you think would happen?" "Would everyone be satisfied?" "Do you think we would have solved our problem?" "Are there any flaws?" "Where would we possibly fail?"
>
> Work toward consensus. Do not adopt a solution until everyone agrees to at least try it. Try to sense when agreement is close. The best way to test for consensus is to say, "It seems we all agree on number three. Does anyone not agree?" And keep the decision tentative. Ask the group if they would be willing to try out number three to see if it works: "I'm willing to try this out, how about you?" This helps students understand that their decision will not be cast in bronze, that they can always reconsider and change it if it turns out that it is not the best.
>
> Write down the agreed upon solution. Some teachers ask all participants to sign a written statement, much like a contract, to indicate that they understand its conditions and terms and agree to them. If someone hesitates when it comes time to sign, you know that you have not yet achieved consensus. If this happens, tune in to the student's feelings. Do not allow anyone to give in to group pressure, to capitulate, to be submissive. Be sensitive to student messages that may indicate less than positive feelings about a solution. Get feedback. Check them out. Grudging submission is not consensus. (p. 232)

If it is still not possible to arrive at a consensus after these procedures have been tried, some other factors must be taken into consideration. Even though the remaining ideas on your list appear good, it may be there's something about each one that is not acceptable to one or more people. This should be dealt with in an open way. Perhaps they can be modified in some way. If this doesn't seem possible go back to the brainstorming process and generate some more ideas, then proceed through each of the

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Toward consensus

Keep trying

Notes

steps, making sure that each group member is assuming his or her responsibility in the mutual problem solving/decision making process. If a solution still is not reached keep trying alternatives. Let the group know you're concerned about not reaching agreement. Search out the possibility of a "hidden agenda". Perhaps the problem should be tabled until later. Don't give up. Keep talking and thinking together. A mutual decision can be reached. The first time may be difficult but as each becomes skilled in the process it will become easier.

Guidelines for group leader

The process of group consensus is used by the Institute for Development of Educational Activities (|I|D|E|A|) in its work with educators during "We Agree" workshops. These workshops are a part of training for involvement in Individually Guided Education (I.G.E.). They have developed the following guidelines which are designed to help group leaders facilitate consensus formation. Though they are designed for educator groups rather than classroom groups, they are included here because they can be adapted for use in the classroom.

a. The group leader can keep the goal--group consensus--clear and foremost in the minds of the group members, by reminders when needed and by clear statements of the group goals before the problem is tackled.

b. The group leader can move the discussion to a higher level of generality, if it seems that agreement is impossible at the present level. Example: The leader might say: "Okay, now Jane feels that three parent conferences should be held a year and Robert thinks there should be no less than four, and we're stuck there. Let's back up a step and see if we can agree on a more general statement: 'Teachers should meet with parents several times a year.' Can we all agree to that?"

Remember: General ideas unite, specifics divide. If disagreements are irreconcilable, move the discussion to the next level of generality.

c. The group leader can change the subject altogether. He can, in fact, direct the group to consider why they are having so much trouble establishing some common ground.

d. The group leader can ask group members to collect their ideas into several categories. This will help to narrow the focus of the discussion and make agreement possible.

e. If the discussion is stalled, the group leader should have the group stop to establish some criteria by which it will be able to continue. If, for example, the group is stymied over the problem of what kind of a sports program it wants to have, perhaps the group should step back and first decide on the criteria by which it feels a good sports program is judged.

f. The group leader may decide to stop the discussion altogether and give group members additional time in which to think about the issue. (Kinghorn & Benham, 1973, p. 24-25)

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Implementing decision

Once a solution is decided upon it must be put into action. It is important that this be a real part of the total technique of mutual problem solving. The outcomes of this part must be specific. When will the decision be implemented? Are there any preparations that must be made? Who will be responsible? In other words, deciding who does what and when is the

Notes

goal for this part of the process.

Follow-up

The final step in the total technique is that of follow-up. Finding out how the solution or decision is working will determine the effectiveness of the mutual problem solving/decision making process. If it appears that the decision is not being effectively implemented, several things might be considered:

a) Are students trying to carry out a decision because they think a decision made must be kept no matter what? Help them to see that a part of the process is the evaluation of decisions, discarding ones that are ineffective and then searching for decisions that are effective.

b) Were students committed to the decision or the process? Perhaps the original commitment was unrealistic but no one realized it because of their involvement in the process.

c) Has the situation changed, thus making the decision unrealistic?

In evaluating how effectively decisions are working it is important to remember:

DECISIONS ARE REVERSIBLE!!!

It is also most important to remember that it is decisions that are ineffective not the students!

Personalize the process

As you work through this procedure keep in mind that some of the steps may not be necessary for you and your group. They are all provided so that someone who has not had experience with this way of teaching will have some security in his or her first venture into mutual problem solving/decision making. It is an exciting process—"Try it—you (and your students) will like it!"

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Notes

Role Playing

Uses of role playing

Role playing has been around for many years and has been used in a wide variety of setting been used in labor disputes so that each side could begin to see the other's feelings. It has been used in psychotherapy to help individuals try out new behaviors. It has been used in kindergarten classrooms to let students become dancing clowns or courageous lion tamers. It has been used in senior high classrooms to allow students to experience a Civil War battle. From the most sophisticated to the most informal the end result is the same--people beginning to know what it would be like to be different than they are.

Definition

Role playing is exactly what the name implies--playing a role, a role that is not the player's usual role. It may be a real or a fictitious role. The situation played may be a real or fictitious one. Because the student is playing a role different than his or her own role, the actions can be objectively analyzed both by the player-student and the observers. Role playing provides the opportunity for students to air their feelings without fear of reprisal. They are encouraged to be frank and spontaneous.

Purposes

Role playing may be used for a broad range of purposes from examining group or individual problems to "trying on" a worker role. It brings life situations into the classroom for close scrutiny. This is why it is important to the process of infusing

Career Education into the curriculum. It is another way of looking at and experiencing life.

Several people have written in the area of role play (Chesler and Fox, 1966; Dinkmeyer, 1973; Michels and Hatcher, 1975). Each has suggested certain conditions that must be present for successful role play. They have also identified steps to follow when carrying out the role play process in the classroom. The following is an adaptation and compilation of their ideas. For a more detailed description please see their books or articles.

It is important to consider several things before entering into the role play process with students. These conditions or guidelines are vital to its success. They are:

1. The classroom atmosphere must be open and accepting. Students must be supportive of each other.
2. The player-students must have some knowledge of the situation and the role they are playing.
3. The situations should not be threatening to personal privacy. Focus activities on typical behaviors and problems.
4. Start small. Help class warm-up to role playing process by having them play charades or some creative dramatics activities.
5. The role play process should be a part of the overall instructional program and should not serve as an end in itself.
6. Pay close attention to the length of the total role play session, from introduction through discussion and reenactment. The following are suggested time limits for various age groups:

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Conditions

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lower elementary	15-20 minutes
upper elementary	20-30 minutes
secondary	45-60 minutes

Remember: stopping an activity while students are still interested will help them want to participate next time.

The following are the steps to be followed each time a role play situation takes place. Each is important and can mean the success or failure of the process.

Steps

1. Preparation
   --warm-up class
   --identify situation
   --select participants
   --prepare audience--are they to watch for specific things or to be general observers

2. Action
   --allow enough time for students to get into role
   --if prompting MUST occur refer to character, not player personally

3. Discussion
   --bring students back to reality--break from role
   --player and/or audience can contribute to discussion
   --assure that all comments are directed to role
   --analyze actions--talk together about strong and weak points of portrayal. Get opinions of players first

4. Reenactment
   --give opportunity for players to reenact their role play situation so that they may incorporate ideas from discussion into action.
   --encourage new or different methods of problem solving

Sociodrama

Sociodrama is a specific type of role play that deserves special note here. In this technique, situations are acted out by a group. It is usually an interpersonal situation. Though the pre-conditions are the same as for other forms of role play, the procedure is a little different. The class goes through the warming up procedure, but only the situation and locale are given to the class--no further instruction. The designated group then enacts the situation. Throughout the action, observers are encouraged to go up to players and whisper their own ideas and suggestions about what's happening in the action. The leader stops the group before it reaches a logical conclusion. The follow-up discussion is a vital part of the sociodrama process.

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Creative dramatics

Another process which is related to role play is creative dramatics. It can be used as a warm-up to full blown role play activities. Even though creative dramatics is a part of role play, it is not role play. Role play is concerned with communication between audience and player, or player and player, whereas creative dramatics is primarily concerned with communication with self. The overall goal of creative dramatics and role play is the same. That is: "To develop more effective human beings." Creative drama is mentioned here because of its helpfulness in facilitating warm-up for role play.

Practice ideas

Appendix V-2 is a listing of situations and ideas suitable for general role play, sociodrama and creative dramatics.

Notes

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Values Clarification

An hour of television on Saturday morning...a walk down the cereal aisle at the grocery store...a look at the movie page in a newspaper...three hours with a group of friends...a survey of the record counter...a look at the toy section of a discount store...each of these situations bombards people of all ages with decision-making demands. How will each individual make these and the hundreds of other choices with which each is confronted day after day? The values a person has developed are a large part of the decision making process. Unfortunately, too few people are aware of their values and even fewer are aware of the tremendous impact values have on their lives. This frequently leads to indecision or conflict within one's self when certain decisions are made.

Values may be described as the guiding force in our lives. They are our highest priority. They influence every decision we make and give us self-definition (Curwin and Curwin, 1974). Therefore, it is important that we have a clear idea of what our values are. The process of identifying our values is called "values clarification." Simon and Clark (1975) explain values clarification in the following way:

> Values clarification is a way of examining our lives and determining values that are important to us. It is not a set of morals or ethics. It is not a list of values which we merely memorize and repeat. Values clarification is a process which can help us become more aware of our values--those fixed, and those changing or emerging. (p. 17)

Notes

Decision bombardment

Unclarified values

Impact of values

Values clarification

Notes

Results of values clarification

Ways of viewing valuing process

Need base

Moral development

The outgrowth of values clarification is a person who has greater control over his or her choices and is, therefore, a freer and more accepting human being. Teachers who have become involved with values clarification in their classroom report that a greater calm exists and that students become more cooperative and caring.

There are several ways of viewing values clarification. Some see values within the framework of the needs of individuals (Rucker, Arnspiger, & Brodbeck, 1969; Simpson, 1973). This group of people identifies eight basic needs that must be satisfied. They are: affection, respect, skill, enlightenment, influence, wealth, well being and responsibility. Each person must, through guided help, acquire these value areas for himself or herself. Another way of viewing the basis for valuing is through Lawrence Kohlberg's concept of moral education (Mattox, 1975). Kohlberg has identified six universal stages of moral development. These stages, through which everyone must pass, are:

Stage One: "Avoid punishment"
Stage Two: "Self-benefit"
Stage Three: "Acceptance by others"
Stage Four: "Maintain the social order"
Stage Five: "Contract fulfillment"
Stage Six: "Ethical principle" (p. 22)

(Mattox has developed a concise and meaningful explanation of Kohlberg's theory. Anyone who is interested in knowing more about his theory and its application to problem solving situations should read this book.)

These two ways of viewing the valuing process, and in turn, human behavior, are worthy of a closer look by those wanting to become involved in the values clarification process.

The remainder of this section will focus on the processes of valuing as identified by Raths, Harmin and Simon (1966). According to this group, a value is based on Choosing, Prizing and Acting. Choosing includes: choosing freely; choosing from among other alternatives; and choosing after consideration of consequences of each alternative. Prizing includes: being happy with choice and a willingness to publicly affirm choice. Acting includes: doing something with choice and repeating the choice in various situations. Each of these conditions must be present for a value to exist.

Raths, et. al. and Simon, Howe and Kirchenbaum (1972) as well as Simon and Clark (1975) have developed a series of classroom strategies which are helpful in helping students to identify and clarify their true and real values. To be most effective values clarification must become a conscious part of the total classroom experience. Appendix V-3 gives some activities for use in your classroom. Before any activities are conducted, it is important that:

- --teachers think through the process and apply it to their own lives
- --an atmosphere of trust and openness exist within the classroom

Notes

Choosing prizing acting

Classroom strategies

Foundation for implementation

Notes

--students know their ideas will not get them into trouble

--students are seen as thinking, decision making human beings with a right to their own opinions

--everyone own their own feelings--this means saying "I feel" instead of "Don't you think?"

--each person involved remember: we are helping people clarify their values. Our job is not to tell them what they should believe.

Take your time

When you are beginning the infusion process, it is important to take one step at a time and to keep in mind that it will take you all a little time to be ready to share really freely. Be patient and don't rush yourself or your students. Keep trying and use lots of "tender loving care."

Play it safe

It is important that you begin with non-threatening activities. This gives students (and you) a chance to try out this new way of revealing their ideas in front of their peers and allows you to focus on the atmosphere. After every activity ask the question "What did you learn about yourself today?" The answer need not be oral, but this opportunity to answer orally should exist each time. Each activity is to be taken seriously. Values clarification is not an isolated, one-shot process, it is an ongoing part of the curriculum.

Values clarification is an exciting educational process. It will open doors you never dreamed possible for both you and your students. Proceed with caring and caution and you will become involved in something which will help make your classroom more productive both in terms of academic growth and personal growth.

Notes

Try it!

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World of Work Exploration*

Exploration of the World of Work and Workers will be exciting for both you and your students. You will discover jobs you don't know exist. You will discover varying reasons for working. You will begin thinking more about your own life career decisions--past, present and future. As you and your students begin exploring there are several process skills which are essential to maximizing your experiences and learning. Meeting and talking with people in the World of Work and Workers necessitates that pupils feel at ease with the process of interviewing. This requires that students acquire the skills necessary for appropriately asking and responding to questions. The second process, preparing for and taking field trips, has been a part of teachers' planning for years. They are also a vital part of infusing Career Education into your curriculum. With a few changes in overall focus you will be able to facilitate personalization of field trip opportunities for both yourself and your pupils. A third process, classroom visits by resource persons, enables you and your students to explore the world of work without leaving your classroom. Student-planned presentations mean that pupils will assume a greater responsibility in planning interesting class

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*Adapted from Gysbers, N. C. Career education methods and processes. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1974.

Notes

Discover the world of work

Skills

Interviewing

Field trips

Resource people

Student-planned presentations

Notes

presentations. In turn, this means that you will have to assist students in gaining the skills necessary for planning and making their presentations. Each of these processes will be explained briefly on this and the following pages.

Interviewing

Why teach interviewing?

Teaching students the process of interviewing serves a two-fold purpose: 1) it prepares students for getting the most out of a talk with a worker and 2) it provides students with a tool that will help them to learn the most from their environment through questioning.

Interviewing is a skill

Very young children are natural question askers. This may make it appear that they shouldn't have to be taught the skill of interviewing. Even though they are natural question askers they must be taught the refinement of the skill. Interviewing is a developmental skill and must be taught sequentially. The goal is for students to be able to participate in an interview using the conversation as a guide rather than relying on a set of written questions to provide basis for conversation. An early (kindergarten) start on activities leading toward this goal will see it fully developed by twelfth grade.

Types of interviews

There are two types of interview--an individual interview and a group interview. For the very young or insecure student the group interview is the most reasonable. The individual interview means that the interviewer has full responsibility for the interview. Thus, it is important that a high level of skill be developed before this is undertaken.

Interviewing requires that students go through several cognitive processes. They must ask the question and then be ready to receive an answer. When the answer is received it must be reviewed so that an appropriate response can be made. This all must occur in a split second's time. It is important that this process be considered when teaching students to interview. Once the interview is completed the student must synthesize the information gained. This means relating it to his or her past experiences. Once the information is synthesized it must be generalized to others and other experiences. As new situations arise the interviewer must be able to relate the information when appropriate.

It is clear that interviewing is not a simple process of asking questions. It is a skill that must be systematically taught.

Field Trips

Traditionally field trips have focused on products being produced, e.g., classes have gone to the bakery to see how bread is baked. With Career Education the focus is on the people as well as the product. Observing a worker first hand is a way of having students begin to identify the kinds of things

Notes

A cognitive process

People centered field trips

Notes

they might like to do. Field trips are ways of bringing life-centered activities into the classroom.

Alternatives to field trips by bus

With increased gasoline prices and school budget cuts, it may be necessary to reduce the field trips a class ordinarily takes. This situation calls upon the creativity of the teachers and students to think of alternatives. The following are possibilities:

--Take a walking tour of community. Visit a specific worksite.

--Consider a full fledged field trip to another part of the school. Students use the library every day, but do they know what a librarian does? Breaking into interest groups will help cut down on congestion in one place. It also allows for more personalized learning to take place.

--Watch for workers around the building. Look for people like truck drivers and repair people. When possible, talk with worker.

--Encourage individuals to take field trips on their own or with their family. Help students plan for this.

Think of some more field trips that use human energy instead of natural resource energy.

Planning

Planning for field trips is very important. Taking field trips that encourage students to talk with workers means someone will have to talk to someone at the worksite to be visited to make these arrangements. It is also important that classroom planning take place. The following steps are suggested as a guide to planning for field trips:

I. Decide to take a field trip
   A. Identify site (where going)
   B. Identify participants (who's going)

II. Make physical arrangements
  A. Obtain permission from the principal
  B. Contact and obtain permission from the person in charge of the place to be visited
  C. Obtain permission for pupils to go on field trip from parents or guardians
  D. Arrange for bus or for parents to drive if place to be visited is not within immediate community

III. Plan details of visit
  A. Pre-trip planning
    1. Gather factual background information
      a. from books
      b. from resource persons
      c. from filmstrips/movies
    2. Talk with pupils about expectations of trip
      a. workers to be seen
      b. tasks performed by workers
      c. product produced
    3. List anticipated questions
    4. Decide how information will be recorded
    5. Discuss specific details
      a. time and date of field trip
      b. method of transportation
      c. individual responsibilities
      d. special needs
        1. clothing
        2. food
        3. equipment or tools
  B. Post-trip planning
    1. React to field trip
      a discuss expectations of field trip and compare with actual experiences
      b. select group to make written reactions to field trip (Appendix V-4)
      c. select group to write a note of appreciation
    2. Extend and share field trip experiences
      a. gather information to answer questions that arose as a result of the new experience
      b. write stories, create songs and plays
      c. make charts, murals, booklets
      d. plan three dimensional display

Careful planning will lead to a world of work experience that will be valuable for all involved.

Notes

Steps in planning (cont'd.)

Notes

Resource people

Purposes for inviting

Worker self concept

Classroom Visits by Resource Persons

Inviting resource persons to the classroom provides an opportunity for exploration of the world of work without leaving the school building. Most of the procedures that are followed in planning field trips will be applicable to planning for people coming into the classroom. Inviting people into the classroom to talk with educators and pupils serves a two-fold purpose--it provides opportunity for getting more personally acquainted with people in the world of work and it provides opportunity for people in the world of work to visit a school to see first hand what's happening in education today.

People representative of a variety of occupations will be invited to visit the classroom. It has been common for teachers to invite dentists, nurses, and fire fighters, but seldom are garage mechanics, morticians and back hoe operators asked to talk with classes. Being asked to speak to a class about their work help to improve the worker self/work concept.

When students are first beginning to put their interviewing skills to work, classroom visits by resource persons enable them to try their new skill free from distractions. These visits will facilitate the student's becoming comfortable with all types of world of work explorations.

In order to develop a file of people who are available to serve as resource persons, send a questionnaire home with the students (Appendix V-5 and 6 provides one possibility for a letter and a form). When forms have been returned and compiled, be sure that you plan for a way to let those who volunteered know what your plans are. If it is going to be six months before you invite them let them know.

Resource file

Not only is it important for classroom resource people to have an idea of when they may expect to be invited, it is also important that they know what is expected of them when they visit. The letter in Appendix V-7 is a sample of one you might want to send.

Communicate with resource person

Advance preparation is as important when resource persons are coming to classroom as it is when you are going out of the classroom. The plan on pages 45 and 46 for field trips may be adapted for use when a resource person is visiting the classroom.

Plan for visit

Student Planned Presentations*

When students have completed a particular world of work exploration, they will need some way of communicating their findings to others. This can either be an exciting part of the world of work exploration or it can be a very dry and anti-climactic part. Picture for a moment the pupils making their

Student reporting

*The material in this section is adapted from material contained in the "Learner Managed Media Kit" developep by Arni T. Dunathan and Edward L. Meyen and copyrighted by Learning Designs, Inc.

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Utilize student creativity

presentations to the class. What media are they using? Unless they are using media such as the overhead projector, slides and/or filmstrips they've made, the tape recorder, pictures they've taken, posters they've created or simulations as a part of their presentations they are not utilizing their own creative presentation potential and chances are their presentations are something less than exciting. Students can learn to make presentations that are interesting and worthwhile to listen to or look at. The key is they can LEARN... which in turn means they must be taught. Teachers as facilitators of students' growth are responsible for providing them with opportunities to learn.

Personalized presentations

Teaching students techniques for the operation and utilization of a variety of types of media for communicating ideas frees them to take more responsibility for their own learning. Individual differences may be met through students choosing the media or medium with which they feel most comfortable.

Sharing information

An important consideration in planning for presentations is that not all information is appropriate for all students. Thus, it is not necessary that all pupils hear or see each of their classmates' presentations. The choice of who will observe a presentation will be a mutual decision made by teachers and individual students. The teacher and/or students may decide that some of the information is valuable to one person, a small group, the whole class or all classes in a particular grade level. Presentations, therefore, may be made to one other person, to a small group or to a large group. This idea should be kept in mind as pupils are planning their presentations.

Planning for presentations

An important part of each of the world of work exploration components has been the planning stage. It is no less important in student-planned presentations. The preliminary steps in the planning stage involve asking the following questions:

--What will be presented?
--Who will be the audience?
--How will information be presented?
--Where will presentation take place?
--When will presentation take place?

Once these five pertinent questions have been answered pupils are ready to enter the actual planning of the presentation.

Teacher role

Although students are responsible for the actual planning and implementation of the plan, teachers serve as facilitators and overall coordinator/encouragers. They should be aware of pupils' progress and problems in planning each of the presentations. In the beginning and especially for younger students, educators will be more directly involved in guiding and facilitating the process than they will be as their students become more accustomed to planning their own presentations.

Student-planned presentations mean that educators will be assuming a less active role in disseminating information to pupils. This does not mean that their

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roles will be less important, it merely means that their responsibilities will change. Educators, themselves, will have to be familiar with the various media available in their educational setting. They do not have to be experts if they are able to utilize resource persons to help students learn about media presentations. It is mandatory that students have opportunities to experiment with different media to see which they prefer for their own presentations.

Courage to try

Of great importance in the educator's role is giving the students the courage to try new things... even though they might not be successful. This requires a non-critical and non-judgmental environment which enables students to risk. A part of an environment which encourages students to try new things is individual reinforcement. The educator has the responsibility for giving positive reinforcement for individual successes.

Noise level

The noise level in the classroom will be considerably higher than it is normally. This may be difficult for educators to adjust to at first. A part of the educator's role is to develop a tolerance for "healthy" noise. If students are task oriented and noise is a result of their involvement, it will be known to the educator as well as to those outside critics who happen by. While it takes courage for students to risk trying new things, it takes more courage for an educator to relinquish the peace and quiet that comes with orderly and structured assignments.

Some of the media you might want to have your students venture forth with include:

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Suggested media for presentations

Illustrations: These may accompany a story or perhaps they are all of the presentation. They may be small or they may be large. Let the student decide what is appropriate.

Posters and Charts: Using these helps students to get their ideas across in a helpful way.

Bulletin Boards: A good way for all to share in one student or a group's learning.

Cassette Recordings: This will allow students to listen to a report or other oral presentation at their "leisure."

There are any number of other things--overhead projectors, slides, simulations--that may also be used by students for making presentations. Encourage their creativity--give them some freedom and the results will be amazing!

Notes

For additional reading in this area please see any of the following:

Evans, R., Hoyt, K. & Mangum, G. Career education in the middle/junior high school. Salt Lake City: Olympus Publishing Company, 1973.

Gysbers, N. C. Career education methods and processes. Columbia, Missouri: Instructional Materials Laboratory. University of Missouri-Columbia.

Gysbers, N. C., Miller, W. & Moore, E. J. Developing careers in the elementary school. Columbus, Ohio: Charles E. Merrill Publishing Company, 1973.

Hoyt, K. B., Pinson, N., Laramore, D. & Mangum, L. Career education and the elementary school teacher. Salt Lake City: Olympus Publishing Company, 1973.

ACTIVITIES

Activities

The processes discussed on the previous pages must underlie a successful Career Education program. They are processes that apply no matter what the subject matter or grade level. They are the unifying force from activity to activity. Using these processes, activities become more personalized for every student.

On the following pages you will find a number of activities grouped in a variety of ways. When appropriate, samples of activities suitable for elementary and secondary are included for the grouping patterns. As you're reading through the activities, imagine you and the students in your class or classes as participants in the activities. What changes will be necessary to make the activity more personalized for you and your students? The activities are flexible.

Once you've read through the activities, see how many of your own you can begin to create using those presented here as seeds. When you've developed some additional ideas share them with the Career Education Steering Committee and other teachers. By sharing ideas back and forth you will build a valuable local resource for yourself and other teachers which will in turn be beneficial for the students in whom you each have an interest.

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Share ideas

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Ideas Organized Around Broad Learning Areas

One way to organize activities is to use the broad learning areas as a theme around which to group ideas. One activity might be used to help meet several objectives within one goal area. With a change of focus or an extension, one activity can be used for several goals.

Activities for K-3 Level
(Based on Learning Areas)

I. Self Knowledge

K-3 Self knowledge activity

WHAT IS A FRIEND?

--Talk with pupils about friendship. Joan Walsh Anglund's A Friend is Someone Who Likes You and similar friendship books offer excellent starting points.

--Sitting with class in a circle, toss a bean bag to a pupil. As you're tossing the bean bag say "A friend..." or "Friends..." or "A friend is someone who...". The person catching the bean bag completes the sentence and then tosses the bean bag to someone else, repeating the phrase. Continue the process until they still want more and yet a fair number of pupils have had an opportunity to participate.

--Follow game up by having pupils fold a piece of drawing paper into four sections and in each section draw a picture of one thing they can do to be a good friend.

II. Knowledge of Life Roles, Settings and Events

K-3 Roles, settings, events activity

WORK I DO AT HOME/WORK I DO AT SCHOOL

--Have pupils fold a piece of drawing paper in half. In one half they are to draw pictures of work tasks they do at home and in the other half pictures of work tasks they do at school.

--After pictures are drawn, make a big chart on which you compile a master list of all (or a fair number) of the work tasks for each setting.

--Compare the lists for similarities, e.g., same work tasks done at home by several people, work tasks that are on both lists.

--Compare the lists for uniqueness, e.g., a task performed at home by just one person on list, work tasks which are unique to home or school setting.

--This is an excellent place to talk about the interdependence of people. You may want to talk about what would happen if they (or nobody) took responsibility for a specific task.

III. Planning

WHO DECIDES?

K-3 Planning activity

--On slips of paper write a number of decisions pupils are a part of each day. Include decisions that may be made for them and decisions they make themselves. Some possibilities are:

Whether to do assignment or play around
When to get up
When to eat lunch
Whether to eat lunch or not
What to wear
Who to play with

--Put slips of paper in a "hat" and have pupils take turns drawing. When they draw a decision have them tell whether it's a decision they make or someone else makes for them.

--Help pupils to begin thinking about the direction and control they have over their lives, e.g., Someone else may decide when they eat, but they decide whether or not they do eat. Guide pupils in beginning to think of the consequences of their decisions, e.g., they may decide NOT to eat. What are the consequences of that decision--now, tonight, tomorrow, two days from now?

IV. Academic and Vocational Skills

PLACES WE LEARN THINGS

K-3 Academic and vocational skills activity

--Talk with pupils about the many things they have already learned; things such as walking, talking, how to cross the street, how to get what they want in a store. Share with them some things you've learned. (Be sure to include things you've learned in places other than school.)

--Label a bulletin board space with the caption "PLACES WE LEARN". Each of you draw a picture of some place you've learned something (the "something" doesn't have to be a big learning) and place the picture on the bulletin board. Make labels that tell

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what was learned in the various places.

Activities for 4-6 Level
(Based on Learning Areas)

I. Self Knowledge

4-6 Self knowledge activity

EXPLORING INTERESTS

--For three or four days have each pupil keep track of his or her activities from the time school is out in the afternoon until going to bed at night.

--Have each pupil make a chart showing the time spent on each activity.

--Talk together about patterns. Ask such questions as:
How much time do you spend doing things you like?
How much time do you spend doing things you dislike?
Are you satisfied with the patterns?
How might you change?

--Follow up talking time by providing the opportunity for those who choose to do so, to establish a plan for change.

II. Knowledge of Life Roles, Settings and Events

4-6 Roles, Settings, Events activity

WHAT'S MY ROLE

--Write a number of roles on slips of paper. Examples are:

brother
sister
teacher
taxpayer
politician
mechanic
minister
father
grandmother
shopper

--Place slips of paper in "hat". Have a pupil draw a role and act it out for 15 seconds. Then have other pupils ask questions to determine role.

--Person who identifies role gets to draw next. If "role" is not determined within 15 questions, have pupil disclose role and choose the next person to draw.

III. Planning

4-6 Planning activity

RANK ORDER

--Have pupils rank order the following from most preferred to least preferred:
1. Working on a committee with friends who are not

good workers.
2. Working alone.
3. Working on a committee with people who are not friends but are good workers.

1. Helping someone poor that you don't know.
2. Helping someone rich that you know.
3. Helping yourself.

--Talk about why they ranked the situations as they did. (Be careful to keep your own values from influencing what they say!) Do not spend a lot of time on this--the intent is to get pupils started thinking about themselves and what they think is important (value).

IV. Academic and Vocational Skills

IF THERE WERE NO SCHOOLS

4-6 Academic and Vocational Skills activity

--Have pupils close their eyes and imagine that they are asleep in their beds. All of a sudden someone is shaking them and they hear, "Wake up, wake up!! Guess what...they just announced on the radio that there is no more school--they've ALL been closed!"

--Talk with pupils about the results of that event. Their initial reaction may be joy--stick with them, they'll come to some real consequences.

--Have pupils think of some way they may share their learning with some other persons.

Activities for 7-9 Level*
(Based on Learning Areas)

I. Self Knowledge

VERY INTERESTING

7-9 Self Knowledge activity

--Allow the students a quiet time in which to think about and write down five of their major interests (activities, hobbies, people...).

--Divide the class into small groups of 3-5. Students spend a short time telling each other about their interests. Ask the students to stay in their groups and tell them that each member of each group will now spend some time talking about the relationship between one of their interests and the subject matter dealt with in this class.

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*This set of activities was developed by Ms. Suzanne Fitzgerald Dunlap. Career Education Curriculum Project, University of Missouri-Columbia, Columbia, Mo.

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For example:

Interest	Subject
bicycling	Science: --concept of force (chain and gear action); repair (friction avoided by addition of oil between moving parts)
back-packing	Physical Education: --What safety measures should be observed in different terrains --muscle development necessary to carry pack effectively while hiking
textile designs, knitting, fabric creations	Home Economics: --process used for spinning, dyeing, etc. Science: --interaction of dyes and mordant
films - theatre - television	Language Arts: --background study of writer or director Foreign Language: --study of language and culture (a variety of which are part of many films)
gardening	Earth Science: --botanical studies

--After learners have had a chance to brainstorm in their groups explain that each individual now will write several paragraphs describing one of his or her interests and how it relates to the class subject.

7-9 Roles, Settings, Events activity

II. Knowledge of Life Roles, Settings and Events

WHY WORK?

--Have students create role-play situations on the theme "Why Work?"

Example: Two girls talk together as a wife who does not need to work to contribute to the family income and a wife who does; two boys take roles as a man who could afford to retire but does not want to, and a man who would love to retire but can't; a boy and girl role-play a husband and a wife discussing work roles in the home, why certain tasks must be done, and who should do them. For variety and interest, have students reverse roles.

Relate these role-play topics as much as possible to similar situations in historical or present-day events you may be studying or to plots of books or movies currently of interest to the students.

III. Planning

RANK ORDER

7-9 Planning activity

--Have pupils rank order the following from most preferred to least preferred:

1. Going to a movie that is really super, super good with a person you don't like so well.
2. Going to a movie that's really a bummer with someone you enjoy being around.
3. Staying home and watching T.V.

1. Going on a car trip to "Disneyland."
2. Flying to "Worlds of Fun."
3. Going canoeing.

Create situations which will reflect value dilemmas encountered in your subject matter area.

--Talk with the students about why they ranked situations as they did. (Be careful to keep your own values from influencing what they say!) Do not spend a lot of time on this--just get the thinking started.

IV. Academic and Vocational Skills

HOW IS SCHOOL IMPORTANT?

7-9 Academic and Vocational Skills activity

--Make up a list of skills currently being taught or which the students need as a basis for their current study (division of fractions, metric measure, drawing conclusions...).

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--Identify people in the world of work who utilize the particular skills and arrange for the students to talk with them--either through interviews outside of class or by inviting the worker to visit with the class at school.

--Provide learners with sample forms to fill out or follow and with activities outside the classroom which will give them some practical experience with math. Plan to make these experiences coincide with skills described by the world of work interviewees and/or speakers.

Examples:
- --read and record the gas meter at your home
- --figure a utility bill
- --figure loan and/or savings interests
- --balance a checking account book according to a monthly statement
- --measure your room at home and figure dimensions and amount for some wallpaper
- --figure out measurements and amount needed to purchase some "lay-it-yourself" carpet-squares for the bathroom at home
- --convert a recipe to the metric system and follow through with it (for a class treat, perhaps)
- --examine the stock market. Learn about the procedure for investing and then keep current with the market

Activities for 10-12 Level*
(Based on Learning Areas)

10-12 Self Knowledge activity

I. Self Knowledge and Interpersonal Skills

TIME LINE

--Invite an older person in the community to share his or her own time line with the class. While the speaker is addressing the class you jot down key words at appropriate points along a continuum line drawn on a long piece of shelf paper.

--Allow about fifteen minutes for students to interview the speaker.

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*This set of activities was developed by Ms. Suzanne Fitzgerald Dunlap. Career Education Curriculum Project, University of Missouri-Columbia, Columbia, Mo.

--The following day, or soon after, have the class, as a group, develop a time line. Using the speaker's continuum as a guide, put up another piece of shelf paper and have the students help construct a "time line of man". Mark off 5 and/or 10 year intervals. Ask the students to identify the various needs of people of all ages--the physical and emotional fulfillments people seek at the different stages of life.

Some ideas for you to keep in mind as you help the students brainstorm are: What kinds of recreation do people like? Bicycle riding? At what age? What kinds of schools might people go to at what ages? How much income do people need? When? Why? What kinds of working situations can people expect at different ages? What kinds of honors might they receive at different ages? Athletic prizes? Honorary degrees?

--The following day, or soon after, have the students each construct their own time lines. Remind them to include events--as the speaker probably did; and needs as they discussed for their group continuum; and any other personal data they might want to include, such as interests. Allow several class sessions (perhaps in Art) so that students can tape on cut-outs, or draw pictures, or otherwise "dress up" their time line.

II. Knowledge of Life Roles, Settings and Events

AT YOUR LEISURE

--Give learners an opportunity to develop a list of adult leisure-time activities. (Interview adults; clip pictures from newspapers and magazines depicting leisure activities.)

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10-12 Roles, Settings, Events activity

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--As students report on their finds, make additions to the list of activities. The final listing might include such leisure activities as gardening, model building, stamp or coin collecting, television viewing, bowling, boating, fishing, travel, golf, tennis, dancing, needlepoint, quilting, bingo, attending plays, museums, movies, and sporting events. Students might mark particularly unusual hobbies, such as collecting string, antique hunting, curling, quilling, playing cribbage, playing the kazoo.

--Follow up by investigating and comparing training necessary for some activities, equipment needed, money required.

--Look at some of the new occupations which are emerging as a result of the general increase in leisure time.

--Discuss factors that promote increased free time (shorter week, greater affluence and level of cultural awareness).

--Using local papers and the telephone directory have students identify community organizations that provide space, equipment and lessons for people interested in pursuing leisure activities.

10-12 Planning activity

III. Planning

TO MAKE A DECISION

--According to the level of the class, introduce an investigation of the five senses. Have the students "experience" gathering information via each sense (listening game, tasting exercise, etc.).

--Discuss with the class how effective they feel each sense is in collecting information about our environment. Talk about how people who are lacking sight, for example, might make up for their deficit by developing keener hearing or tactile senses.

--Following the discussion explain to the class that during the next 10-15 minutes you are going to put a record on for background music. Tell them you have two records and then ask which they would like to have you put on. (Don't show the records or tell what they are.) Due to the lack of information the students will quickly react to the dilemma.

Have on hand two very different records--one with words and one without, or one classical and one popular. Have the records out of their identifying covers.

--Hold the two "uncovered" records up and ask for a decision from the class as to their choice. Again they should react to not having adequate information.

--Finally, play each record for a few minutes in order that the learners can hear the difference between the music.

--After hearing the types of music, hold up each record cover so that the students can see the title and the name of the artist.

--Allow the class to decide (by discussion and/or voting) which record they prefer to use for background music.

--Once the music is on and the learners are accustomed to the new "touch" to the classroom atmosphere, discuss with them what has happened. In order to make sound decisions we need to gather information and investigate the available alternatives. It is through our senses that we perceive the world and bring in information from the environment. Then, after analyzing this information, we are better prepared to make a decision. Talk with the students about how they put their senses to use in deciding upon the record to play and how impossible the decision was to make without first gathering information.

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10-12 Academic and Vocational Skills activity

IV. Academic and Vocational Skills

LEARNING TO RELATE

--Write out the words for numbers "one" through "ten" in English, French, Spanish and German.

--Ask the students to repeat the number "one" after you in each language. Continue through several or all of the numbers in this manner.

--Through discussion with the class have them point out the similarities between the languages, for example, how the number "one" is similar in its pronunciation, syllables and spelling. Which of the languages is most similar?

--Write out the names of 5-15 colors in English. Have the class divide into small groups for the other languages or work individually in order to list the names of the colors in French, Spanish and German.

--Once the information has been gathered, practice the proper pronunciations and again discuss the similarities and differences between the languages.

--Using whatever language you are studying have the students express the feeling each color invokes in them.

Ideas Related to Subject Matter Areas

The following activities are related specifically to subject matter areas. Even though they are related to subject matter areas, they are also related to specific goals and objectives. Math, Science, Language Arts, Reading and Physical Education were chosen as exemplary areas for activities; however, career education concepts can be integrated as a part of any curricular offering.

K-3 Level Activities
(Relating to Subject Matter Areas)

The activities in this section were adopted and/or adapted from the Guides developed as a part of the following 1974 Grant Award Projects: Columbia, Festus, Hannibal, Lee's Summit R-7, Monett R-I, and North Harrison R-III.

Math Activities

Notes

K-3 Math Activities

Use calendars to figure how many weeks of work in a month. How many work days in a month? How many days a month do your parents work?

Keep record of recess time, study time, sleep time they use each day. Relate this to logs kept by banks, long distance truck drivers, telephone operators.

Total the mileage used by delivery truck drivers (Dr. Pepper Bottling, Bunny Bread, Hiland Milk).

Write numbers individually as high as possible and chart progress on U. S. map as if each number is a mile (write to 500 and you would move from Monett to Chicago).

Compare number of servings to cost per box of cereal. This could be related to restaurant owners and homemaker.

Notes

K-3 Science Activities

Science Activities

Describe the effects of littering on the ecological system (trash in a pond may harm food sources of fish and water fowl

Analyze and describe two effects on an ecological community of a particular proposed project. (A housing development, a new road, a new park, a new dam)

Have the children bring various sized milk cartons that have been emptied. Use the cartons to teach liquid measurement. Discuss how many people are needed to get milk from the cow to the consumer. Make a chart to show the progression.

After a discussion about fire, have students divide into small groups and plan a short skit about a situation concerning fire and firefighters. The students choose their characters, plan their show and write a script. The boys and girls then construct sack puppets to fit the situations planned.

After studying the early methods of food preservation, the student will compare them with modern methods of preservation by making a pictoral chart using magazine cutouts.

K-3 Language Arts/ Reading Activities

Language Arts/Reading

Prepare bulletin board "Who Am I?" Have children write a description of themselves including physical characteristics, special interests and hobbies, and what they like to do. Have class guess who the mystery person is.

Have students draw a 5 page story book of their day. Divide the day into segments of time, i.e.:
a. What happened to me before school today?
b. What happened to me at school during reading?
c. What happened to me during recess?
d. What happened to me during lunch?
e. What happened during math?
The next day have the students choose one picture from their books which was the most important part of the day and tell why it was important to them.

The teacher may ask the children to discuss:
a. What is a family?
b. To what family do you belong?
c. How are families alike?
d. How are families different?
After talking about their own families the teacher may explain to the children that jobs are grouped

in families. Through discussion the children may suggest various ways that jobs can be grouped.

Talk about names--we all have different names. Have the children find out why they were named as they were. Learn the correct way to write names.

Draw pictures of how people would look if they feel happy, sad, angry, excited, confused, etc. After the children have drawn their pictures, let each student act out how he or she looked in the situation. Let the other children guess how he or she feels.

Physical Education

Discuss and describe three physical activities people engage in that allow for appreciating and enjoying nature (camping, hiking, swimming, fishing, etc.). Talk about how physical education classes help prepare us for these activities.

A school physical education teacher may visit the class to explain his or her role in helping us stay healthy and provide recreation. Encourage the children to ask questions concerning:

a. duties
b. training
c. advantages and disadvantages of work
d. other vocations related to work

Discuss values such as regard for others feelings, fairness, and sharing that are important parts of Physical Education activities.

Participate in a field day. During practice ask: In which event are you most or least able? Could you do this event alone? How do you feel when you do something alone or with others? How do you think someone should act when they win or lose?

Play a Family Occupation Game. Seat the children in a circle. Have one child roll a ball to another. The child who catches the ball tells his or her family name and his or her parents' job. Variations: Name Community Helpers or Jobs We All Have.

4-6 Level Activities
(Relating to Subject Matter Areas)

The activities in this section were adopted and/or adapted from the Guides developed as a part of the following 1974 Grant Award Projects: Columbia, Festus,

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K-3 Physical Education Activities

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Hannibal, Lee's Summit R-7, Monett R-I, and North Harrison R-III.

4-6 Math Activities

Math Activities

Create a shopping center in the classroom. Let some students be merchants. Include a banker. Let them set prices for their goods and services. Other students will be customers with a given amount of money. Then let them buy and sell at will. Guidelines may need to be established.

Decide on an amount to represent an annual salary and use math skills to break this amount into monthly, weekly, and hourly wages. Also, apply deductions to make children aware of take home pay amounts.

Invite a pharmacist to visit the class and explain the importance of math in his or her daily work. Other professionals in the community could be utilized in this activity.

Develop and use a monetary system within the classroom. Print money. Set up a bank with a teller, president, board of trustees, etc. Students earn money through classroom jobs. Specify salaries for classroom roles.

Brain Teaser - give written problem in mathematics and have whole class work it. Compare the different methods used to arrive at this answer.

4-6 Science Activities

Science Activities

Have students divide into committees and each committee be responsible for a topic on corn, soy beans, wheat, or other crops to find how the crop is grown, harvested, and marketed.

Make a roller "movie" from the mining of iron ore to the finished car. List other resources involved in the making of a car like rubber, chrome, etc., in picture form.

Through research, compare occupations in different countries relating to resources (i.e., mining, logging). After listing specific jobs and countries, research the possibilities of being able to use your occupation in another country (i.e., farmer, commercial jet pilot, government worker, coal miner and possibilities of these jobs in Japan, Bolivia, Mexico, Argentina, Canada). Discuss whether or not the duties to be performed would be the same.

Trace the development of an invention in a specific industry (i.e., rubber, transportation, communication, recreation). Explain how the specific inventions created or eliminated jobs, and thus brought about changes in society.

Have students bring in articles on new potential sources of energy, e.g., solar, nuclear.

Language Arts/Reading Activities

Write stories using titles such as: What I Like About Myself, My Favorite Place, I Want to Be, My Favorite Hobbies, etc.

The students will put together a trial by jury. Part of the class will be involved with putting the trial together (writing a murder trial, traffic ticket, burglary, etc.). Another part of the class will be involved with being the jury. One student will be selected as the judge. The students will act out the trial (also assign lawyers, witnesses, defendent, complainant, etc.). The jury then will have to make a decision as a group as to the guilt or innocence of one member. Students will have a follow-up discussion on the difficulty or ease they had in making a decision in regards to a guilty party.

Students will brainstorm all their ways of collecting information in regards to decisions they make daily (i.e., teachers, principals, other students). Students will discuss which people play the most influential role for them at school (or home) in decision making.

Have student write a story showing some of the problems in a world where every one either looked alike or acted alike, or both.

Take a World of Work trip to local radio station to learn of possible jobs available in the field of broadcasting. After World of Work trip have students organize into groups and put on a radio program including such workers as announcer, writers, newscasters, weather reporter and sports announcer.

Physical Education Activities

Help students understand our physical fitness through having them: check physical dexterity by timing while students attempt to thread a needle; check physical dexterity by tossing erasers into waste

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4-6 Language Arts/ Reading Activities

4-6 Physical Education Activities

Notes

basket while being timed; check physical endurance by using any one of the repeated exercises (chin-ups, sit-ups, pull-ups) and have class do them.

Have three different groups write out detailed directions for playing a familiar game. The teacher directs the class on the playground using the directions submitted by each group.

Identify physical movements involved in work. If possible, students should observe, catalog and graph the movements (i.e., reaching, bending, walking).

Establish some identity through development of good sportsmanship. Discuss behavior and correct way of accepting defeat or victory.

Invite a well known local high school athlete to class. Have him or her talk with students about benefits of exercise, proper rest, good eating habits in relationship to effect on playing ability and general health. If a professional player is available it would be informative to have him or her talk another time.

7-9 Level Activities
(Relating to Subject Matter Areas)

The activities for this section were adapted and/ or adopted from the following 1974 Grant Award Project Guides: Cabool, Cameron, Jackson R-2, Shelby County R-IV, Sullivan C-2 and Warren County R-3.

7-9 Math Activities

Math Activities

The students will be able to compute interests on a loan:

a. Visit from loan officers from local bank to discuss loans, buying on time, etc.
b. Figure interest on loan at legal interest, difference between actual cost, and cost with loan, "real" interest rates.
c. Determine how much is saved by paying cash.

Students will measure an area of the classroom to be carpeted. A carpet layer will be invited into the classroom to describe the methods and tools used in measuring a room to be carpeted. He or she will then remeasure the classroom and will emphasize the importance of systematic method as well as precision in measurement, noting the difference in cost that inaccuracy could produce.

Explain in word or writing how math is used in some leisure activity such as bowling, tennis, pool, football, etc.

Develop the relationship between logical thinking and decision making by applying logic to solving math problems.

Learn to read the financial page of the newspaper. Research people who rely on the financial page for occupation or for investments only.

Science Activities

Have narcotic agent and pharmacist come to talk about use and abuse of drugs as well as their occupations.

Panel discussion on "How Science Needs Have Made New Jobs in Many Industries."

Using the Science Cluster have students predict the life style that would be possible for a particular job. Following predictions, have students check with three workers in that field to make sure their predictions are correct.

If you selected to fill a job in a large company, your employer would be concerned about your health. Give five ways to promote good health in each category listed below:

a. Food habits
b. Personal hygiene
c. Mental hygiene
d. Exercise
e. Smoking and drinking

Organize a panel and discuss the advantages and disadvantages of several of the following science occupations:

a. Ecologist
b. Bacteriologist
c. Nurse
d. Forester
e. Geologist
f. Sanitarian
g. Surgeon
h. Ceramic Engineer
i. Electrical Engineer
j. Research Chemist

Language Arts/Reading Activities

Conduct role playing situations involving the student in:

a. Employer--employee
b. Employee-employee
c. Employee--customer
d. Telephone etiquette

Notes

7-9 Science Activities

7-9 Language Arts/ Reading Activities

Notes

Discuss advertising principles (layout, psychological uses of). Study various types of advertising to see how each is trying to sell its product. Divide class into small groups to create an advertising campaign for a product or school activity. Discuss in terms of principles used.

From an area newspaper pick out four jobs that you would like to know more about. (Ads may be cut out.) Write one sentence telling why you might want to know more about each job that is offered.

List the responsibilities that parents have to their families on the board. Then list the responsibilities that a student has to his or her classmates, school, teacher, and to self.

Classify jobs under one of these headings:
1. Occupations that require technical training.
2. Occupations that require college preparation.
Have the students bring in want ads from newspaper. Discuss the want ads in terms of what kinds of training and skills are in demand and what kinds of training and skills have a surplus.

7-9 Physical Education Activities

Physical Education Activities

Research non-participation sports fields as sportscasting, statisticians.

Develop the relationship between physical education skills and professional sports.

Ask students to study different careers as to physical and mental advantages and disadvantages.

Have students role play a sports announcer and set up a sports schedule.

Identify a physical skill such as lifting heavy objects easily. Brainstorm as many occupations as possible that use that skill.

10-12 Level Activities
(Relating to Subject Matter Areas)

The activities for this section were adapted and/or adopted from the following 1974 Grant Award Project Guides: Cabool, Cameron, Jackson R-2, Shelby County R-IV, Sullivan C-2 and Warren County R-3.

Math Activities

Have a bank or credit union representative talk about various types of credit:

1. person to person
2. charge account
3. revolving account
4. time charges
5. bank borrowing
6. credit unions
7. mortgages
8. federal loans (FHA, SBA)
9. credit cards

The students will itemize their expenditures for a two-week period and compute what percent of the total amount was spent each day. The student will study this information and determine if and how their money could be put to wiser use.

Have random students teach the lesson for extra points. (Help them in the preparation of the lesson.) Discuss problems of communication.

Work with the relationship between the arithmetic mean and school teacher.

Students gain an awareness of the cost of utilities by totaling the cost of water, electric, and gas bills, using actual bills from the various companies.

Science Activities

Obtain a guest speaker to describe the science programs available in your area. Discuss the number of people going into various fields, what new fields are opening up and those that tend to be filling up.

Organize the class into small groups each of which will act as a panel for 20 questions. Each panel will present to the class an example of a skill or concept used in an occupation related to science. If the class cannot identify the occupation with 20 questions which require a "yes" or "no" answer, the panel wins.

Students in small groups will role play events and situations in an occupational choice in the field of science showing the effects of personally accepting the role of decision making and its consequences of both the rewards and the adversities.

Invite a detective from the Highway Patrol or the Police Department to discuss related jobs in law enforcement and how the scientific method can be used to solve crimes.

Work with the relationship of probability to the predicting of rain by the meteorologist.

Notes

10-12 Math Activities

10-12 Science Activities

Notes

10-12 Language Arts Reading Activities

Language Arts/Reading Activities

Through class discussion identify kinds of events which may affect a person's career choice and development.

Students will study literature through the conflict approach. They will search for conflicts caused by failure to communicate.

Have each student make a recording about herself or himself, listening to and adding to at intervals.

Write and present a skit showing that educational level affects employment opportunities.

Watch a television show (Marcus Welby, Rhoda, Good Times, etc.). Write observations of the life style seen in these programs.

10-12 Physical Education Activities

Physical Education Activities

Check the local papers for job opportunities in physical education and health. Give reasons for the number of openings that you find.

Research the lives of super-stars in sports.

Research non-participation sports fields as sportscasting, statisticians.

Invite a professional dancer into class to talk about physical skills required for dancing.

Help students find information about unfamiliar sports. Research to discover where the sport is played and how.

The "Organizing Center"*

Notes

Although the "Organizing Center" may be considered a process it is included with activities because it is a base from which many career education activities are automatically drawn. It is an idea that can be used equally effectively by a kindergarten teacher or by a senior high science teacher. The "Organizing Center" concept allows teachers and students to plan together their learning experiences. Through the "Organizing Center," teachers and students are able to use their most creative thinking in planning...the sky's the limit once the door has been opened.

Creative teaching

An "Organizing Center" is just what the name implies, a center around which to organize activities. There are no restrictions on what an "Organizing Center" can be. It can be an idea, a person, a place, a thing, an activity, or a skill. The form of the "Organizing Center" is not known until teacher and students begin planning together. Developing an "Organizing Center" into learning experiences involves the processes of brainstorming and consensus formation. Once the "Organizing Center" has been conceptualized each of the other processes will play a vital role in the delivery of activities.

Can be anything

Taking the "Organizing Center" from the thought

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*The "Organizing Center" concept was originated by Dr. Walter Wernick and the staff of the Authentic, Basic, Life centered Education (ABLE) Project at Northern Illinois University, DeKalb.

Notes

Think of anything

stage to the action stage is an exciting procedure. It is one in which everyone can become actively and enthusiastically involved. The first step is to think of a person, a thing, a place, a skill, an activity or an idea around which to develop world of people activities. For exemplary purposes here we will use "television station" as an "Organizing Center."

Brainstorm

After the "Organizing Center" has been decided upon, the next step is to brainstorm as a group all the people who are involved in the operation of a television station. The list might look like this:

announcer
camera person
weather reporter
newscaster
advertising person
secretary
manager
custodian

From the list decide on several people around which activities can be planned. Be realistic in the number you select. For the first few times you utilize the "Organizing Center" concept you may want to select one and as you and your students feel more comfortable select more. We've selected the weather reporter and the advertising person as our people of focus.

Make learning alive

The third step involves the generation of ideas about what kinds of things are available to bring these people closer to the students. What materials are available? How many types of resources are there? What human resources are available to make the experiences more real? In looking at the weather

Notes

reporter and advertising person we might come up with:

- visit to television station
- visit to weather bureau
- weather reporter visit class
- advertising person visit class
- watch television weather
- watch television commercials
- how does television set work?
- how does weather bureau predict weather?

Skills

After seeing how these people can be brought closer to the students, the next step is to see what skills can be taught or reinforced through the activities of the focus people. For the advertising person, the weather reporter and the general area of television, the following skills might evolve:

Math:	Telling time Planning enough material to fill up a specified time Prediction
Reading:	Oral reading skill Comprehension Vocabulary knowledge Choosing persuasive words
Language Arts:	Creative writing Speaking before a group
Science:	How sound travels How television picture "travels" How to interpret "high front", "low front", "barometer is rising"
Art:	Drawing pictures for commercials Designing sets
Music:	Selecting appropriate background music

The possibilities for skill tie-ins are endless. These are mentioned as starters for other ideas.

The final consideration is to think about what the students can do and who you can involve. In what

Notes

Creative participation

activities will students participate? What can they do to share their learning with others? How can parents be involved? For our television personalities some ideas are:

Create an imaginary product. Design package for product. Write a commercial selling product.

Time commercials with a stop-watch.

Listen to background music of television shows. Relate type of music to mood of show.

Write and produce a television play. Utilize as many people as possible, Make it as real as possible in terms of creating commercials, announcements, station breaks and actual production.

These ideas are merely representative. There are a myriad more that will evolve as you and your students plan together. As you begin to use the "Organizing Center" you'll find more and more ways to put people and people activities into the classroom.

For additional information about the "Organizing Center" approach see:

Wernick, W. Teaching for career development in the elementary school. Worthington, Ohio: Charles A. Jones Publishing Company, 1973.

Separate Activities

The following activities are designed to be used "as is" or they may be expanded to incorporate the four learning areas--Basic Studies, Self Knowledge; Planning; and Roles, Settings and Events. Your imagination (and energy) will be the only limit to the extent you carry each activity.

K-3 Level
Ideas for Separate Activities

1. Have pupils explore the work their mothers and/or fathers (or an important other person in their lives) do. Focus on two or three different pupils each day. With them create an experience chart telling about "their" adult's job. This is a good way to develop an appreciation for all workers and to assist pupils in seeing how all honest work contributes to society. Inviting parents to the classroom will make their occupations become more real to the pupils.

2. Put a full length mirror in your classroom. Allow pupils time to study themselves in the mirror. As they try out different roles let them spend some personal time at the mirror. Be prepared for some "silly" exploration. They may be embarrassed to purposely look at themselves in the beginning.

3. Have students make a picturebook showing people and situations in various types of jobs and the kinds of uniforms they wear on the job (nurse, police officer, doctors, waitresses, waiters, soldiers, sailors, athletes, etc., etc., etc.). In pictures watch for signs of sex biases, e.g., are the doctors all male and the nurses female?

4. Make a class "feeling word" dictionary. Bind a number of 12" x 18" sheets of drawing paper together. As you introduce feeling words such as happy, sad, disappointed, frustrated, excited, anxious, lonely, write the word on a page in the big book. Have pupils find pictures of people who are showing that feeling.

5. Have students work in small groups to put together a bulletin board or collage from magazine pictures of people at work.

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K-3 activities

Notes

K-3 activities cont'd.

6. Talk together about the decisions that are made in the classroom each day. Decide on a specific time block (e.g., from lunch to afternoon recess) and indicate on a large chart each time a decision is made, either by individuals or by the entire group.

7. Role play occupations in the classroom. Begin a collection of hats and costumes which can be used as props in acting out various jobs. You may be able to borrow real workers' hats or equipment for a short period of time.

8. Tour school and discuss jobs performed by school personnel.

9. Draw a rough outline of a familiar building or site--Safeway, Swope Park Zoo, the laundry--on the board. Have children brainstorm about all the workers that are necessary to keep it going.

10. Have students write stories about "Some jobs I think I would like" or "When I grow up I would like to be a _________". Stories could be dictated by the students.

11. Visit several places where people work by taking walking tours in the school neighborhood. (Frequent visits will build familiarity with the workers and call attention to features of the work they do.)

12. Make a mural about people at work in the community. Include such people as the grocer, doctor, postal worker, educator, clerk, firefighter, police officer, beautician, and any others you and your pupils think of.

13. Have a group of pupils who are interested in the same occupation plan and present a play about that occupation.

14. Select a worker. On board or on a chart tablet make a list of the decisions that person makes as a part of his or her job. Rank decisions as difficult or easy.

15. Write about any or all of the above activities in picture stories, booklets, class newspapers, etc.

4-6 Level
Ideas for Separate Activities

1. Have the students write short stories about "The Things I Do Best." (These papers might be saved and looked at in a couple of years.)

2. Provide students an opportunity to study unusual and little-known occupations in the professional, technical and non-technical fields.

3. Develop projects which show the occupations associated with the various holidays. For example: Valentine's Day: cards--designer-manufacturer-seller; candy--manufacturer-seller; post office.

4. Make a list of the interests of students in your class; check to determine to what extent opportunities are presented in the school to assist them in development of these interests and the acquisition of new interests.

5. Analyze newspaper ads for discussion of jobs available. Discuss male and female hiring policies and include in discussion the skills and training required for specific jobs.

6. Plan a hobby show and follow it with a discussion of leisure time activities. If possible, have adults take part in show also and plan to have several people talk with class to identify the variety of ways they may use their leisure time.

7. Read through the Yellow Pages to seek out the many different types of jobs available in the community.

8. Provide pupils with special opportunities to talk with people who are in non-traditional roles--e.g., male seamstress, female linesworker.

9. Present students with the opportunity to explore the contribution various clubs and extra-class activities make to their life career development. This project is especially important to students preparing to enter junior high school where selecting school activities is important.

10. Help students prepare their own personalized career notebook. Include in it: a study of their interests, abilities, special aptitudes, skills, notes from class discussions, test profiles, and clippings from newspapers which are related to occupations or leisure activities of particular interest to them.

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4-6 activities

Notes

4-6 activities cont'd.

11. Have students work in committees to prepare a chart of the occupations which require skills in the various subject areas.

12. Have class correspond with the students in other geographic areas describing their communities and work and workers found there. Descriptive booklets of the communities could be written and illustrated with pictures exchanged by the students.

13. Place a silhouette of a human figure on the bulletin board along with three captions: abilities, interests, occupations. The class may develop a hypothetical person, making up his interests and abilities. Then the class can make a list of the many occupations the individual could do well in.

14. Have students "brainstorm" the word cooperation. What is the first thing that pops in their head when the word cooperation is used? Be careful not to indicate judgement of quality of answers. Follow-up activity by inviting a worker in to discuss importance of cooperation on the job.

15. Review with the class the various regions of the United States and the principal industries. Emphasize the concept that some occupations can be found anywhere and some can be found in only particular areas of our nation or the world.

7-9 Level
Ideas for Separate Activities

7-9 activities

1. Debate "How important is money in choosing an occupation?"

2. Have students project themselves 10 years into the future. What will be their major activity? Where will they be living? What will they do with their leisure time?

3. In groups, have students plan presentations about the implications of a four day work week.

4. Discuss the effects on the local community and our country if there was a work stoppage on the part of all members of the art field.

5. After a discussion of personal characteristics, have students write a paragraph about the relationship of their characteristics to possible future jobs.

6. Invite a representative of the Better Business Bureau to talk with class members about deceptive advertising, unfair treatment of consumers, unauthorized door to door salespersons and other situations which they encounter. After visit have students role-play appropriate reactions to dishonest business practices.

7. Following a group project, have students write papers or paragraphs about how each one's perception of others influenced their ability to work cooperatively.

8. Have students analyze themselves in terms of their health, their leisure time pursuits, the kind of climate they prefer and their current occupational preferences. From this information have students choose a geographical location in which to live and then analyze that location in terms of jobs available in their current job preference.

9. Role play times when a difficult decision has to be made, times when a person is in conflict with himself or herself, e.g., failing versus cheating; pleasing parents versus pleasing friends).

10. Have students research the lives of well known Americans to discover how their lives have been influenced by their values. Look at the way values guide them in their occupations as well as how they come into conflict with their occupations.

11. Using Charles Schultz, Security is a Thumb and a Blanket as a "warm-up," have students create a bulletin board titled "Security Is...". Have a discussion about behavior that results from persons having or not having security. Include in discussion possible ways for self-improvement.

12. Have students look through want-ads and select several jobs. In small groups, have students talk about how these jobs contribute to our lives.

13. Have students study a community group related to a subject matter area. Include visits to the group meetings and perhaps form a student group. Discuss experience in terms of whether or not they'd like to get involved in a similar group. Some possible groups are--Business Education - Business and Professional Women, Chamber of Commerce; Industrial Arts - labor unions; Speech - Toastmasters.

14. Talk about the increase in leisure time. What are the implications of this for our lives and the world of work?

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7-9 activities cont'd.

Notes

15. Brainstorm together about the effects of NO ONE working.

10-12 Level
Ideas for Separate Activities

10-12 activities

1. Invite a female who has the dual role of worker and homemaker to visit class. Ask her to talk with class members about the pressures of each and how she copes with each. Have her also talk about the roles each of her family members assumes in relation to her dual role.

2. In small groups, have students plan a short trip. Have them decide where they're going, how they'll get there, where they'll stay, transportation, what they'll do while they're there. Also have them calculate total cost. (It would be fun if they could actually take trip and compare their projections with actuality.)

3. Have students develop a projected personal budget and compare proposed budget with earning power in his or her preferred occupational choice.

4. Have students make up a game showing what would happen if sale of a specific item was stopped permanently.

5. Have students investigate various public and private agencies which are available to assist consumers.

6. Have students explore how current scientific discoveries will affect specific occupations (e.g., flouridation and dentistry).

7. Simulate a group situation in which people are working together on a task. Have one student role play the part of a consultant who has been called in to make recommendations about how they can become more efficient.

8. Have students write a want-ad about themselves. Have them tell what unique and special contribution they can make to the World of Work.

9. Have students rank such things as money, working conditions, creative work, work alone, easy job, challenging job in order of importance to him or her in choosing an occupation.

10. Have students write a story entitled "My Life as a ______." Encourage creativity, but also

realism.

11. Have students list personal qualities which will help him or her succeed in the World of Work.
12. Discuss and role play situations in which a person would need occupational retraining. Think of such things as promotions, job loss, job obsolescence.
13. Have each student become involved in a school or community based organization or activity, e.g., church work, volunteering, political campaigns, club work. Talk about importance of community work.
14. Have students explore worker traits other than job skill which influence getting and keeping a job.
15. Have students construct a hierarchy for their preferred occupational choice, place themselves at an entry level and project their progress along the hierarchy in terms of time. Have them validate projections with a worker in their preferred choice.

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10-12 activities cont'd.

Part 6

Resource Utilization

Overview: This part of the Handbook deals with ways of selecting and utilizing resources--material and human. Included are guidelines that will be useful in the selection of materials. The services of the Career Resource Center in Jefferson City are also discussed.

Contents

Types of Resources 1
- Student or Teacher-made 1
- Commercially Prepared 2
- Free and Inexpensive Materials 2

Selection of Materials 3

Missouri Career Resource Center 4

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Resource Utilization

Resources, both human and material, are another important component of Career Education. They provide a means for further personalization of learning experiences. It is essential that resources be used to their fullest and that they be used with meaning.

Types of Resources

Resources can be people or they can be materials. If they are materials they can either be commercial or teacher/student made. Each makes a unique contribution to Career Education programs.

Material Resources

When considering in which resources to invest it is important that you consider for what purposes they will be used. It may be that materials which teachers and students make themselves will be most appropriate for one use and that commercially prepared will be most appropriate for another.

Student and/or teacher-made materials offer limitless opportunities for personalizing the program. Just a few possibilities are:

1. Have inexpensive, easy to operate cameras available for student use on field trips or interviews. In this way students can contribute to a first-hand world of work experience file. Use either slides or prints.
2. Expand the above activity to include the use of cassette audio recorders. In this way, a sound/visual presentation can be planned.

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Types of resources

Material resources

Hand-made

Notes

3. Have students create and develop a game focusing around one of your Career Education goals.

4. Make a set of worker hats to use as props for classroom simulations and role play.

5. Invite parents to make a recording in which they talk about their various roles.

6. Make worksheets relating to current Career Education focus.

7. Have students write and illustrate a story about something they REALLY like to do.

8. Have students make transparencies to illustrate a presentation.

9. Have students bring in objects his or her parents use in their work.

When you and students are creating materials, keep in mind that not everyone needs to do the same type preparation at the same time, i.e., some students may make an audio presentation while others are working on a play about their experiences.

Commercial materials

Commercially prepared Career Education materials come in a wide variety of sizes, shapes and forms. There are tapes, movies, filmstrips, books, games, kits and workbooks. There are materials for the kindergarten student and for the person going through a mid-life career crisis.

A few years ago there was a seller's market as far as Career Education materials were concerned. It is now indeed a buyer's market. The purchaser of Career Education materials today faces a real decision making situation.

Free and inexpensive materials

Free and inexpensive materials provide another

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type of prepared Career Education materials. Appendix VI-1 is a listing of sources for free and inexpensive materials. Even though they are free or inexpensive, the use of these materials should receive the same scrutiny as do materials which are purchased. They must fit into your total program in theory and in actual student involvement.

Use with care

Selection of Materials

Selection

When selecting Career Education materials it is important that they be selected with careful thought about what the materials can do for your program. Be sure to preview all material before purchase to assure that each one can indeed accomplish the learning the advertisements say it will. The following guidelines will provide some direction in the selection of materials:

Guidelines

1. How effective will material be if implemented? Does it provide learning potential which will facilitate the acquisition of skills, knowledge and understanding necessary to reach a specific behavioral objective or goal?

2. For what population is material designed? Is material suitable for the general population of the school or is it more appropriate for a specialized group? When selecting materials keep in mind the developmental level of students as well as their sex, ethnic membership, self concept, motivation and educational level. Special populations, such as the gifted and talented, retarded, physically handicapped, disadvantaged and minorities, should be given consideration as to their unique needs. It is important that there be a balance between acquisition of materials which meet the needs of every individual and those that focus on needs of a special group.

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Selection guidelines (cont'd)

3. Can material be implemented with existing resources? Will the staff need extensive training to be able to implement materials in the classroom? Do you have available the necessary hardware for successful implementation?

4. How easily can it be infused into total ongoing curriculum? What will the impact be on the current curriculum? Is material clearly identified as to subject matter and grade level for which it is most appropriate?

5. Is material free of sex role stereotyping, racial discrimination, or occupational denigration? Is everyone given an equal chance at success and all occupations viewed as an essential part of the world of work?

6. Is there a broad range of occupational options depicted through illustrations and examples?

7. Does the material provide for a variety of learning modes? Is there visual as well as audio stimulation for students to experience?

8. Is material based on a model of Career Education? In other words, how does publisher or author view Career Education and how is that reflected in materials? Is it consistent with your district's view of Career Education?

9. Is the material flexible enough to be modified to meet specific local needs? Can it be used in many different ways?

These guidelines are provided so that you can begin developing an evaluation scheme appropriate for your own use. Appendix VI-2 is one possibility for a checklist.

Missouri Career Resource Center

Missouri Career Resource Center

The Guidance Services Section of the Department of Elementary and Secondary Education has established a Career Resource Center at the Hammond Building in Jefferson City. The primary purpose of the Career

Resource Center is to aid in the promotion of Career Education through providing information, materials and assistance to local schools in the planning, implementation and evaluation of Career Education programs.

Notes

Preview materials

The Center is designed to provide Missouri educators with the opportunity to preview materials they are considering for purchase. A broad range of materials suitable for a K-12 Career Education program have been purchased. They are available for preview in Jefferson City. A few of the materials are available on a loan basis. An important point is that only materials which have been reviewed and found to be worthwhile and materials recommended by someone who's used them are purchased for the Center.

Project materials

In addition to having commercially prepared materials available, the Career Resource Center has materials developed through the Career Education Grant Award Program and other Career Education projects funded in Missouri schools. Through the help of people at the local level, the Center keeps updated on innovative and successful Career Education activities.

Newsletter

A newsletter concerning activities of the Career Resource Center is published several times during the school year. Included in the newsletter are Career Education comments from people in the field, Career Education ideas as well as information about new Center acquisitions.

The Career Resource Center is intended to be a

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helpful resource for all Missouri Career Educators. Only with input from you will this be possible. Please let the Center staff know how they may help you.

People Resources

New ideas for people

The possibilities for the use of people resources in Career Education are endless. We've talked about inviting people in to share their life's work with the class and we've talked about taking field trips to visit people at work. Let's look at a few other ways of including people in your Career Education program. A couple of the ideas are tried and true and a couple are ideas that will require a little doing to accomplish. Read them all and see how you can adapt the seeds they plant to your own needs.

Older citizens

History teachers: Utilize older citizens as a way of personalizing history. What were the people of the United States doing when World War II started? How did midwesterners react to the market crash? Where were they when John Glenn made his first space flight?

Tutors: Include parents as possibilities for tutoring students with special needs. It would be great if you could match interests of the tutor to that of the child.

Storytellers: Invite community people into class as storytellers or readers. Scout around for people who are really actors or actresses at heart.

Special skills

Skill teachers: Survey class or classes to discover special things class members would like to learn to do--things like bake bread, decorate a cake, build a racer, learn to dance. Put out a call to people who would be willing to help a few students learn these different skills. (Be sure to include grandparents in your search.)

Class help: Perhaps you need a new piece of equipment (a peg board or a ring toss) or some other kind of room improvement. Search out a community person to help you accomplish this task.

Once you get started, the possibilities will flow freely and you'll have a whole range of people involvement you never dreamed possible.

Conclusion

Resources are an important part of any Career Education program. To be the most beneficial they must be used wisely and with the goals and objectives of the overall Career Education program in mind.

Notes

Special tools

Think of more

APPENDIX I-1

GLOSSARY

Career Development: lifelong process that involves a series of experiences, decisions, and interactions with one's career growth or changes.

Career Education: a comprehensive curriculum - related effort that melds diverse materials and teaching strategies into a sequential program K-12. Academic, vocational, and general curricula are blended to produce interrelated learning activities for all youth.

Career Awareness: a knowledge of occupations as they relate to the behavior, education and training, growth, rewards, and lifestyles of persons in specific occupations and occupational clusters.

Career: a purposeful life pattern or style. A sequence of choices that form a pattern throughout one's life and that represent aspects of the self concept.

Affect: those elements of personality that make up the emotional or feeling aspects of human behavior.

Affective Education: a planned educational program to help students deal with interests, values, and opinions.

Occupational Information: materials that describe or explain job requirements, wages, working conditions, trends and outlook, and lifestyle.

Career Identity: the relationship of individual needs to a selected job or career that helps one participate successfully in various life roles.

Career Preparation: the acquisition of skills, attitudes, and values to enter the world of work, including both in-school and out-of-school experiences.

Cluster Concept: a procedure for defining the world of work in terms of interrelated job families, job skills, job attitudes, and training similarities.

Economic Awareness: a knowledge of the production, distribution, and consumption of consumer goods and their implications for career development.

Decision-Making Skills: the aptitudes for problem solving and thinking processes necessary to understanding and participating in the social, economic, and political institutions of society.

Events: the things that happen to each person throughout his or her life. They may be expected or unexpected, joyful or sorrowful. Events have an effect on the person's life as well as the lives of those close to him or her.

Infusion Strategy: a series of teaching-learning activities designed to make Career Education part of the total curriculum.

Interpersonal Skills: those personal skills that help the person get along with others.

Lifestyle: the variables associated with a particular life career that expose the worker to a generally consistent set of values, attitudes, and living patterns. The interrelationship of all aspects of one's life.

Occupation: a general pattern of work activity with consistency and similarity. "Teacher" is an occupation while "2nd grade teacher" is a specific job within that occupation.

Roles: the varied "parts" each person plays throughout his or her life. Each person is a worker, a family member, a citizen, a leisure participant. Each role has a different set of behaviors that accompany it. They combine to answer the question "Who am I?"

Self Concept: the perceptions one has regarding his or her success or skill in social, cognitive, or psychomotor tasks.

Self-in-Work: the perceptions that one has about work activities, either real or simulated, as one participates in them, specifically, one's awareness of how well one is performing in-school or out-of-school tasks.

Self-Understanding: a person's knowledge of himself or herself in terms of personal characteristics and perceptions in relationship to others and the environment.

Settings: the many places each person functions, such as home, school, work, community. Each places different demands on the individual.

Simulation: a learning activity that attempts to replicate the real world in a classroom situation for practice of decision-making or problem-solving skills.

Work: conscious effort, other than that involved in activities whose primary purpose is either coping or relaxation, aimed at producing benefits for oneself and/or for oneself and others.

World of Work: the multitude of occupations that make up the labor force of a society.

APPENDIX III-1

SAMPLE NEEDS ASSESSMENT FORMAT

This example of format for a needs assessment is not a valid instrument and should not be used as such. The items are exemplary only and are not comprehensive or representative.

Name *(If you want individual data, otherwise omit)* Grade ____________

Directions: Listed below are possible needs of students your age. In the column on the left mark an X in the box which best describes how important the need is for you.

In the column on the right mark an X in the box which best describes how well the need is being met for you.

Example

HN	MN	NN		NM	PM	M
X			I need to know what jobs there are.	X		

HN = High Need
MN = Moderate Need
NN = No Need

NM = Not Met
PM = Partially Met
M = Met

HN	MN	NN	Item	NM	PM	M
			2. (1.1.2) I need to get along with my peers better.			
			5. (2.3.1) I need to develop skills which will allow me to choose and enjoy hobbies.			
			8. (3.2.4) I need to develop a sense of purpose in my life by setting goals I can obtain.			
			11. (4.3.2) I need to become aware of occupational training offered in my high interest areas.			
			16. (1.3.5) I need to tell others what I think and how I feel more easily.			
			29. (2.2.1) I need to understand and appreciate the importance that working will have on my life.			
			32. (3.1.4) I need to know how my values affect my career choice.			
			36. (4.3.5) I need to know the differences in training programs for the same occupations.			

SN	MN	NN	Item	NM	PM	M
			39. (2.1.1) I need to understand the advantages and disadvantages of jobs.			
			42. (1.2.5) I need to be needed--to have friends who need my help.			
			45. (3.3.5) I need to learn how to adapt to change.			
			49. (4.1.4) I need to understand the interest costs of credit purchases and installment buying.			
			52. (1.1.5) I need to better understand how to give and take friendship from others.			
			55. (2.3.5) I need to know where to go to learn a new leisure activity, e.g., tole painting, racket ball.			
			57. (3.2.3) I need to save money for the things I need.			
			60. (4.1.1) I need to know how to study better.			
			66. (1.2.3) I need to get less "uptight" when things go wrong.			
			69. (2.1.3) I need to improve my image of some occupations.			
			77. (3.1.3) I need to know how my values affect my life.			
			79. (4.3.1) I need to know how much education and training will be needed for the occupation I plan to enter.			

HN	MN	NN	Item	NM	PM	M
			81. (1.3.3) I need to learn how to express my feelings instead of keeping them to myself.			
			84. (2.2.3) I need to know how to become involved in community groups.			
			89. (3.3.2) I need to know how to re-assess and re-evaluate my goals.			
			95. (4.1.3) I need to improve my understanding of what I read.			
			101. (1.1.3) I need to develop friendships with the opposite sex.			
			109. (2.3.3) I need to know what leisure and recreational activities best fit my interests and skills.			
			112. (3.2.2) I need to know the special skills I will need for my future life.			
			119. (4.1.2) I need to improve my physical abilities.			
			124. (1.3.4) I need to accept criticism better.			
			128. (2.1.2) I need to develop an understanding of how all occupations are important to our community.			
			130. (3.1.2) I need to know how to make decisions about school problems.			
			135. (4.3.4) I need to learn more about requirements for various educational and training opportunities.			

HN	MN	NN	Item	NM	PM	M
			138. (1.2.4) I need to know what I do that affects the way others view me.			
			144. (2.2.2) I need to understand the changing roles and expectations of men and women.			
			153. (3.3.3) I need to consider alternatives available to me after I complete my high school training.			
			155. (4.3.3) I need to know which courses are appropriate to my needs.			
			159. (1.1.4) I need to know how to handle pressure from kids my own age.			
			162. (2.3.2) I need to develop life-long recreational interests that will make my leisure time enjoyable.			
			166. (3.2.5) I need to develop plans which will help me reach my educational and occupational goals.			
			169. (4.1.5) I need to learn how to register and vote in my community.			
			171. (1.2.2) I need to understand how my feelings affect my behavior with others.			
			174. (2.2.5) I need to be able to solve conflicts between what my parents want and what my friends want.			
			178. (3.1.5) I need to be able to make decisions as I study life career possibilities.			
			184. (4.2.1) I need to understand that my education will help me learn the basic skills adults must have to perform tasks.			

HN	MN	NN	Item	NM	PM	M
			189.(1.3.1) I need someone to talk to when I have a problem.			
			191.(2.1.5) I need to learn about how individual workers contribute to the needs and functions of society.			
			197.(3.3.4) I need to develop a flexible career plan.			
			202.(4.2.5) I need to know how my courses are helping me now.			
			209.(1.3.2) I need to be able to talk with my family more easily.			
			211.(1.1.1) I need to improve my friendships with adults.			
			219.(2.3.4) I need to know how to use my time better so I have time to do whatever I choose.			
			229.(3.1.1) I need to learn to judge information.			
			232.(4.2.4) I need to be able to use what I have learned.			
			237.(1.2.1) I need to know how to change things about myself that I do not like.			
			246.(2.2.4) I need to know family expectations of me.			
			255.(3.2.1) I need to begin thinking of an occupation that makes use of my personal talents.			

HN	MN	NN	Item	NM	PM	M
			259. (4.2.3) I need to understand how my education will affect my life.			
			261. (2.1.4) I need to understand the interdependence of all occupations.			
			266. (3.3.1) I need to be able to know when some kinds of change should be made.			
			271. (4.2.2) I need to understand that my educational experiences will help me later on.			

APPENDIX III-2

RESOURCE ASSESSMENT

This form is intended to give you some ideas from which you can develop a Resource Assessment to fit your specific needs.

Human Resources

Counselors	Part Time	Full Time	% of Time Spent in Various Activities
			1:1
			Group
			Classroom
			Consultation
			Administrative

Teachers	Grade/Class	Career Education Activities	Length of Activities	# of Students involved

Administrators	Responsibility	Career Education Activities	Length of Activities	# of Students Involved

Students	Special Skills

Community Members	Special Contributions

Material/Technical Resources

Career Education Books	How Many Copies?	Where Kept?

Career Education Films	How Many Copies?	Where Kept?

Career Education Filmstrips	How Many Copies?	Where Kept?

Career Education Pamphlets/Brochures	How Many Copies?	Where Kept?

Hardware (e.g., projectors) Available	How Many?	Where Kept?

Financial Resources

Salaries (aides, clerical)	$ Amount
________________________________	______
________________________________	______
________________________________	______
Supplies	
________________________________	______
________________________________	______
________________________________	______
Materials	
________________________________	______
________________________________	______
________________________________	______
Tests	
________________________________	______
________________________________	______
________________________________	______
Special Events	
________________________________	______
________________________________	______
________________________________	______
Mailing	
________________________________	______
Miscellaneous	
________________________________	______
Total $	______

APPENDIX III-3

TABLE OF RANDOM NUMBERS (DIGITS)

Row No.										
1	50691	91653	88574	08675	12700	32027	41034	56912	34264	77769
2	19787	66937	91769	13399	96096	43165	72096	86350	23062	99419
3	16746	77983	10861	23664	64557	78213	43857	68009	20483	00618
4	91039	16099	38824	00778	23058	76539	50584	71810	52589	32778
5	11075	62081	88977	78676	53855	56472	13090	01708	89016	45111
6	41230	92934	30342	29933	24597	72632	21727	63861	80454	47243
7	59028	24399	05075	64775	59803	45737	19025	46696	18914	03062
8	42957	25204	00753	60284	85483	34984	86637	95354	80698	98750
9	45881	59475	64445	98261	55252	50788	31295	16437	49497	22493
10	75104	45819	88471	75440	55309	63481	23616	64950	73291	10964
11	78614	07347	63528	84643	10455	95596	38158	75758	65628	10498
12	69278	59274	67459	53563	98241	18097	65297	49803	99145	25320
13	58626	91250	13832	75095	08333	53845	74223	82690	89320	89565
14	81630	00339	07996	65249	66792	05555	79169	12136	44621	95904
15	74330	13688	02044	65910	96007	82692	40473	56437	35671	95072
16	70829	66963	86390	26458	02385	41505	06239	68990	32915	89542
17	55084	58581	60759	20627	86682	76542	03648	38183	29823	68134
18	98845	17428	9739	62400	51284	92211	40593	82713	06067	46190
19	48116	91870	16346	97406	54649	42039	58407	84248	45780	60547
20	82778	31709	71564	26258	07522	03825	92087	21809	25678	39987
21	86615	67618	07446	63129	07111	70516	67289	09457	48995	08043
22	82558	99260	69136	35099	68187	85382	09569	94211	57824	98100
23	08290	70291	74090	96503	56140	27794	27765	51740	07712	29816
24	95062	76310	81603	86828	68370	46001	79205	35511	91239	52961
25	30361	66712	86801	29556	91232	98295	87322	99172	50009	27224
26	17390	96107	70391	78715	61943	33315	39778	97149	08122	86388
27	05390	33046	63920	28733	42644	38972	98161	79861	88282	28279
28	06624	21114	53869	20940	03732	39973	89948	81060	36381	06027
29	38146	77295	33742	00135	26587	54775	94846	18587	39327	71711
30	76430	28645	62335	60393	71813	52677	09917	89100	93855	75617
31	16664	30164	22546	63538	79376	26865	61995	60418	37777	84170
32	56424	64680	81038	79364	23815	44002	38380	09864	35950	10760
33	95954	15540	18554	63349	70259	03212	91950	16214	80378	56421
34	59007	56364	49965	61970	32493	55404	85950	99606	46328	17887
35	19341	87208	99853	40202	08553	78731	83463	19524	82512	13556
36	24505	87007	35748	54865	40209	49466	94574	31406	64422	87185
37	15086	92183	84632	36790	59608	00371	67456	55361	80669	75402
38	65664	02188	09164	70939	25856	24344	58859	10454	19212	59078
39	40397	76835	14062	96067	70645	23695	59140	75812	18804	55529
40	31700	24753	22919	43207	83387	27820	12494	30041	88927	22668
41	14472	19372	23759	47116	81647	44946	97716	41157	30913	30842
42	18018	57089	98428	89075	77511	15194	69634	68269	52292	63404
43	16752	54266	76103	05268	41145	36100	73916	32462	01658	68565
44	47184	33660	96555	56656	18238	56888	29315	99813	47831	81395
45	93884	63945	06606	45545	29237	21040	43552	02749	19963	23705

APPENDIX III-4

EXISTING NEEDS ASSESSMENT INSTRUMENTS

The instruments included here are currently available. Anyone wishing to consider these instruments may order an examination set for a nominal charge.

The following instruments allow for identification of some desired outcome information:

Missouri Student Needs Survey: This assessment instrument was designed for use in guidance programs and is in the process of being revised to include Career Education concepts. It is available through:

Statewide Testing
307 South Fifth
Columbia, Missouri 65201

Priority Counseling Survey: Seeks both current status and desired outcome information. It is a multiple choice format and is available through:

Educator's Assistance Institute
Los Angeles, California

The following instruments are assessments of Career Development or Career Maturity. The items can be translated into need statements to give program direction. When ordering a sample copy, be sure to ask for scoring information as well. Several can only be scored by the company.

The Assessment of Career Development (ACD): This instrument provides for the addition of up to 19 locally developed items. It is available through:

American College Testing Program
Iowa City, Iowa

Career Development Inventory: This test must be obtained through the authors and used only with their permission. Time is an important consideration with this test as it only takes 30-45 minutes to administer. Write for more information to:

Dr. Donald Super
Teachers College, Columbia University
New York, New York 10027

Career Maturity Inventory: Sixth grade reading level makes this 7-12 assessment instrument worthy of consideration. Obtain from:

CTB/McGraw Hill
Del Monte Research Park
Monterey, California 93940

Questa I and Questa II: Questa I is for students immediately upon entering high school and Questa II is for those who have been participants in the schools activities for one or more years. It measures several aspects of the school program. It is for students, teachers and administrators. Information available from:

Program Director
Secondary School Research Program
Box 3601
Educational Testing Service
Princeton, New Jersey 08540

There is very little available in terms of Career Education assessment at the elementary level. One instrument that is available is the:

Specimen Set for the OCC Career/Knowledge and SAS. This test provides the educator with opportunity to assess students in terms of their Career Development. It is available through:

Evaluative Research Associates
Suite 207
8444 Florissant
St. Louis, Missouri 63121

APPENDIX III-5

INDIVIDUAL DATA SHEET*

**This form should only be used if you wish to gain information about certain individuals and their specific needs. The Group Tally Form will provide the information you need for the total group.*

Name ______________________________ School ______________________________

Male _____ Female _____ Grade ______________________________

Date ______________________________ Teacher ______________________________

** HN = High Need
MN = Moderate Need

NM = Not Met
PM = Partially Met

LEARNING AREA 1.0: SELF KNOWLEDGE

Goal 1.1: The student will be able to develop friendships

Item #	Code	HN	MN		NM	PM
211)	1.1.1					
2)	1.1.2					
101)	1.1.3					
159)	1.1.4					
52)	1.1.5					
	Total			Total		

Goal 1.2: The student will relate the effect of his or her personal characteristics on his or her interpersonal relationships.

Item #	Code	HN	MN		NM	PM
237)	1.2.1					
171)	1.2.2					
66)	1.2.3					
138)	1.2.4					
42)	1.2.5					
	Total			Total		

Goal 1.3: The student will communicate openly with others.

Item #	Code	HN	MN		NM	PM
189)	1.3.1					
209)	1.3.2					
81)	1.3.3					
124)	1.3.4					
16)	1.3.5					
	Total			Total		

LEARNING AREA 2.0: LIFE ROLES, SETTINGS AND EVENTS

Goal 2.1: The student will relate occupations to the needs and functions of society.

Item #	Code	HN	MN		NM	PM
39)	2.1.1					
128)	2.1.2					
69)	2.1.3					
261)	2.1.4					
191)	2.1.5					
	Total			Total		

Goal 2.2: The student will know the interrelationship of his or her roles.

Item#	Code	HN	MN		NM	PM
29)	2.2.1					
144)	2.2.2					
84)	2.2.3					
246)	2.2.4					
174)	2.2.5					
	Total			Total		

Goal 2.3: The student will be able to identify the function of leisure time in his or her life.

Item #	Code	HN	MN		NM	PM
5)	2.3.1					
162)	2.3.2					
109)	2.3.3					
219)	2.3.4					
55)	2.3.5					
	Total			Total		

LEARNING AREA 3.0: LIFE PLANNING

Goal 3.1: The student will be able to make effective decisions.

Item #	Code	HN	MN		NM	PM
229)	3.1.1					
130)	3.1.2					
77)	3.1.3					
32)	3.1.4					
178)	3.1.5					
	Total			Total		

Goal 3.2: The student will relate present planning to future outcomes.

Item #	Code	HN	MN		NM	PM
255)	3.2.1					
112)	3.2.2					
57)	3.2.3					
8)	3.2.4					
166)	3.2.5					
	Total			Total		

Goal 3.3: The student will recognize the need for flexibility in planning.

Item #	Code	HN	MN	NM	PM
266)	3.3.1				
89)	3.3.2				
153)	3.3.3				
197)	3.3.4				
45)	3.3.5				
	Total				

LEARNING AREA 4.0: ACADEMIC AND VOCATIONAL SKILLS

Goal 4.1: The student will be able to function to his or her capacity in basic skill areas.

Item #	Code	HN	MN	NM	PM
60)	4.1.1				
119)	4.1.2				
95)	4.1.3				
49)	4.1.4				
169)	4.1.5				
	Total				

Goal 4.2: The student will be able to relate in-school learning to out-of-school tasks.

Item #	Code	HN	MN	NM	PM
184)	4.2.1				
271)	4.2.2				
259)	4.2.3				
232)	4.2.4				
202)	4.2.5				
	Total				

Goal 4.3: The student will know the educational prerequisites of a variety of occupations.

Item #	Code	HN	MN	NM	PM
79)	4.3.1				
11)	4.3.2				
155)	4.3.3				
135)	4.3.4				
36)	4.3.5				
	Total				

APPENDIX III-6

GROUP TALLY SHEET

School ______________________________ Grade ______________

Date ____________________

NOTE: If you want to compile data into special groups (e.g., sex or race) that information must be included with the other information at the top.

Directions:

1. Tally each student's response on each item.
2. a. Determine the total number of HN (High Need) responses and the total number of MN (Moderate Need) responses for each item.
   b. Multiply total HN responses by 2 and add to total number of MN responses (2HN + MN).
   c. This gives the weighted number (P) to be used in ranking items.

   Example:

   HN = High Need MN = Moderate Need P = Priority Weight

Item #	Code	HN	T	MN	T	2HN + MN =	P
211)	1.1.1	卌 卌 卌 卌 卌 卌	30	卌 卌	10	60 + 10 =	70
2)	1.1.2	卌 卌	10	卌 卌 卌 卌	20	20 + 20 =	40

3. Rank items from high to low within each broad learning area.

NOTE: This information is compared with that of other groups (e.g., parents, employers) involved in the assessment to determine final priority rank (see the section on prioritizing needs in Part 3).

LEARNING AREA 1.0: SELF KNOWLEDGE

Goal 1.1: The student will be able to develop friendships.

Item #	Code	HN	T	MN	T	2HN + MN =	P
211)	1.1.1						
2)	1.1.2						
101)	1.1.3						
159)	1.1.4						
52)	1.1.5						

Goal 1.2: The student will relate the effect of his or her personal characteristics on his or her interpersonal relationships.

Item #	Code	HN	T	MN	T	2HN + MN =	P
237)	1.2.1						
171)	1.2.2						
66)	1.2.3						
138)	1.2.4						
42)	1.2.5						

Goal 1.3: The student will communicate openly with others.

Item #	Code	HN	T	MN	T	2HN + MN =	P
189)	1.3.1						
209)	1.3.2						
81)	1.3.3						
124)	1.3.4						
16)	1.3.5						

LEARNING AREA 2.0: LIFE ROLES, SETTINGS AND EVENTS

Goal 2.1: The student will relate occupations to the needs and functions of society.

Item #	Code	HN	T	MN	T	2HN + MN =	P
39)	2.1.1						
128)	2.1.2						
69)	2.1.3						
261)	2.1.4						
191)	2.1.5						

Goal 2.2: The student will know the interrelationship of his or her roles.

Item #	Code	HN	T	MN	T	2HN + MN =	P
29)	2.2.1						
144)	2.2.2						
84)	2.2.3						
246)	2.2.4						
174)	2.2.5						

Goal 2.3: The student will be able to identify the function of leisure time in his or her life.

Item #	Code	HN	T	MN	T	2HN + MN =	P
5)	2.3.1						
162)	2.3.2						
109)	2.3.3						
219)	2.3.4						
55)	2.3.5						

LEARNING AREA 3.0: LIFE PLANNING

Goal 3.1: The student will be able to make effective decisions.

Item #	Code	HN	T	MN	T	2HN + MN =	P
229)	3.1.1						
130)	3.1.2						
77)	3.1.2						
32)	3.1.4						
178)	3.1.5						

Goal 3.2: The student will relate present planning to future outcomes.

Item #	Code	HN	T	MN	T	2HN + MN =	P
255)	3.2.1						
112)	3.2.2						
57)	3.2.3						
8)	3.2.4						
166)	3.2.5						

Goal 3.3: The student will recognize the need for flexibility in planning.

Item #	Code	HN	T	MN	T	2HN + MN =	P
266)	3.3.1						
89)	3.3.2						
153)	3.3.3						
197)	3.3.4						
45)	3.3.5						

LEARNING AREA 4.0: ACADEMIC AND VOCATIONAL SKILLS

Goal 4.1: The student will be able to function to his or her capacity in basic skill areas.

Item #	Code	HN	T	MN	T	2HN + MN =	P
60)	4.1.1						
119)	4.1.2						
95)	4.1.3						
49)	4.1.4						
169)	4.1.5						

Goal 4.2: **The student will be able to relate in-school learning to out-of school tasks.**

Item #	Code	HN	T	MN	T	2HN + MN =	P
184)	4.2.1						
271)	4.2.2						
259)	4.2.3						
232)	4.2.4						
202)	4.2.5						

Goal 4.3: **The student will know the educational prerequisites of a variety of occupations.**

Item #	Code	HN	T	MN	T	2HN + MN =	P
79)	4.3.1						
11)	4.3.2						
155)	4.3.3						
135)	4.3.4						
36)	4.3.5						

APPENDIX IV-1

SAMPLE GOALS

The following goals are grouped around the four learning areas. Notice that each one has the student as the "actor" and is stated in outcome terms--a knowledge, skill or understanding the student will demonstrate as a result of an educational experience. Keep in mind that this list is exemplary and that more goals may be generated for each area.

Learning Area 1.0: Self Knowledge

Goal 1.1: The student will be able to develop friendships.

Goal 1.2: The student will relate the effect of his or her personal characteristics on his or her interpersonal relationships.

Goal 1.3: The student will communicate openly with others.

Learning Area 2.0: Life Roles, Settings and Events

Goal 2.1: The student will relate occupations to the needs and functions of society.

Goal 2.2: The student will know the interrelationship of his or her roles.

Goal 2.3: The student will be able to identify the function of leisure time in his or her life.

Learning Area 3.0: Life Planning

Goal 3.1: The student will be able to make effective decisions.

Goal 3.2: The student will relate present planning to future outcomes.

Goal 3.3: The student will recognize the need for flexibility in planning.

Learning Area 4.0: Academic and Vocational Skills

Goal 4.1: The student will be able to function to his or her capacity in basic skill areas.

Goal 4.2: The student will be able to relate in-school learning to out-of-school tasks.

Goal 4.3: The student will know the educational prerequisites of a variety of occupations.

APPENDIX IV-2

COMPONENTS OF A BEHAVIORAL OBJECTIVE*

Behavioral objectives have four basic components or parts. Remembering these elements will help in the writing of objectives. The parts are:

Actors: The group of students (or adults) who will perform a desired task.

Behavior: A task that the actor can be seen or heard performing.

Conditions: (An optional part of behavioral objectives) What the actor has to work with to perform the desired task; can be materials or a setting.

Degree of Success: The criterion that can be used to determine whether a student has successfully mastered the behavior prescribed by the behavioral objective.

Actors: A behavioral objective specifies what specific persons or "actors" will be able to do after completing a learning experience. The actor, the person who will perform a given task, should usually be a student. It is sometimes helpful to write behavioral objectives for different groups of students. For instance, there are groups of students within your school with different future plans. Behavioral objectives can be written for each of these groups.

Behavior: The behavior portion of a behavioral objective states what the actor should be able to do. The behavior portion describes an "observable" action. An observable action can be seen, heard, or felt. The key words to look for are verbs open to few interpretations rather than many. When specifying the behavior ask yourself the question "Can I see or hear the actor performing this task?" If the answer is no, then the objective is not written in behavioral terms. Words like "know", "appreciate", Understand", "enjoy" are open to too many variations whereas words like "recall", "identify", "demonstrate", "compare", "order" have more specific meanings.

Conditions: The conditions portion of a behavioral objective describes the conditions under which the desired behavior will be performed. Conditions describe either the setting of the actor or state what materials or information will be given to the actor to perform the desired task. The conditions statement is usually placed at the beginning of a behavioral objective. A condition is used to clarify the objective. Therefore, it is an optional part of a behavioral objective. Below are examples of behavioral objectives. The conditions are underlined in each objective. In the first objective, the condition is materials. In the second objective, the condition is a setting.

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*Adapted from: Field Test Version: Career Planning Support System, The Center for Vocational Education, The Ohio State University, Columbus, Ohio.

A. Given a list of employers, the faculty member will describe the procedures for placing students in part-time jobs.

B. In a simulated job interview, students will demonstrate skill in interviewing to the satisfaction of the teacher. The teacher will have a checklist as a basis for determining performance.

Degree of Success: The remaining portion of a behavioral objective is the degree of success. The degree of success of a behavioral objective describes how the actor will be evaluated or how well and by when he must perform a given task to be successful. Key words to look for to identify the degree of success portion are descriptive adjectives or adverbs and numbers. The degree of success portion often appears at the end of a behavioral objective. There are six ways to specify the degree of success. They are:

--describe the minimum quantity of correct responses.
--state the items that must be present for response to be acceptable.
--set a time limit.
--indicate person who will judge whether the performance is successful.
--use descriptive words or phrases.
--state the grade level by which student should achieve the behavior.

Minimum quantity: The minimum, or least, the actor must do and still be successful may be specified by stating the minimum number, percentage or proportion of correct responses necessary for success.

The degree of success portions are underlined in the following examples.

Minimum number	1. Given the names of fifteen occupations, students will correctly describe at least ten of the occupations.
Minimum percentage	2. Given a standardized career maturity inventory, students in grade twelve will score at or above the 50th percentile for their grade level.
Minimum portion	3. Given a list of sources for obtaining occupational information, students will obtain information from at least one-third of these sources during a six-week period.

When numbers are used to specify degree of success, they should not be set arbitrarily. There should always be a logical rationale for stating the minimum number of items that must be included.

State items to be included: No matter how else or how much the actor responds, he or she cannot be successful unless he or she includes the required items. The degree of success portion is underlined in the example below.

Given a variety of sources for obtaining career information, students will perpare a personal information file. Each student's file must contain the following:

A. A sample job placement form

B. Information from local employment agencies about the local availability of jobs

C. Information from the U. S. Department of Labor about the nation-wide availability of jobs

D. Career literature, describing at least three occupations within the student's chosen career cluster

E. A self-report to be updated monthly about changing personal career goals

F. Personal results on a standardized interest survey

Set time limits: How well a student must do to be successful may be stated, in some cases, by setting a time limit. For instance, we may ask a student to "Type a 200-word passage within three minutes." This objective measures the time it takes a student to accomplish the task because in typing, speed is important. Time limits can also be set to measure duration. For instance, "Students will hold a part-time job for at least three months."

Indicate judge: The fourth way to specify the degree of success is by indicating the person or persons who will judge or evaluate the performance as successful. Some of the most common words and phrases that are used in behavioral objectives to judge student success are listed below:

To be
reviewed
judged
graded
rated
evaluated
checked for accuracy
checked for completeness

by
a counselor
a teacher
an employer
classmates
parents
self

Descriptive words or phrases: The fifth way to specify degree of success is by using a descriptive word or phrase that sets a standard for success. Some of the most common words and phrases that are used in behavioral objectives to set standards for success are listed below:

Words

Correctly
Successfully
Adequately
Completely
Exactly

Phrases

Without error
That meets predetermined standards
At an acceptable performance level

State grade level: The sixth way to specify the degree of success is by stating the grade level at which point the student should achieve the behavior. In other words, the student should have or achieve a certain objective by the end of a certain grade level. It should not mean that a student in a lower grade level cannot or should not achieve the objective. Furthermore, the specification of a grade level almost always appears along with another degree of success, such as, "without error," "reviewed by the teacher," or "eight out of ten."

Keeping the "ABCD" of writing behavioral objectives in mind will make the process an easy one.

APPENDIX IV-3

THREE TYPES OF BEHAVIOR:

COGNITIVE, AFFECTIVE, PSYCHOMOTOR

Behavior can be grouped into three basic types: (A) cognitive, or thinking, (B) affective, or feeling, and (C) psychomotor, or physical skill areas.

Frequently, behaviors considered when writing objectives are restricted to the cognitive area. However, it is very important that attention be paid to the affective areas of behavior as well. It is important that students remember information and develop skills and abilities, but it is equally important that students develop interests, attitudes, appreciations, and values about career development. People probably retain more information or skills over a longer period of time in areas of study that they value and enjoy. The distinction between cognitive and affective behaviors will be explored more fully so that both areas will receive attention when selecting behaviors for objectives in your Career Education program.

Cognitive Domain

The cognitive domain involves such behaviors as thinking, knowing, and problem-solving. This area is concerned with the ability to retain knowledge, understand principles and concepts, apply information or skills, and evaluate information. Examples of cognitive behaviors are:

A. List types of information needed for career decisions.

B. Describe a process used in career decision-making.

C. Apply a decision-making process to career choice (Center for Vocational Education, p. 31).

Affective Domain

The affective area of behavior involves attitudes, interests, values, social adjustment, and the development of appreciation. This area is concerned with specifying behaviors that will reflect the students' feelings toward the material they are studying or the willingness to do something. Do they consider a particular topic under study to be important to them as a person? When they have completed a course, they feel their time has been well-spent? What in their behaviors tells us that they value a particular experience, idea, or course of action?

Some examples of affective behavior in Career Education are:

A. Shares information that he or she has acquired with parents, friends, teachers, etc.
B. Suggests an acquaintance that could serve as a source of information.
C. Voluntarily seeks out books on occupations in the library.

D. Persuades friends to become involved in Career Education activities.

It may be necessary to specify a variety of affective behaviors for any given goal so that students will not be locked into one way of expressing their interests, values, and feelings. For example, if a stated goal were "Students will be interested in career choice and planning," any of the examples of behavior given above could be a way of expressing this interest (The Center for Vocational Education, p. 32).

Psychomotor Domain

Behaviors in the psychomotor area emphasize physical skill. They include gross body movements, fine motor movements, speech behaviors, and nonverbal communication behaviors, such as gestures and body movements. The behaviors in this area may not be as fundamental to your Career Education program as the behaviors in the cognitive and affective area. You will find that the majority of your behavioral objectives will emphasize cognitive and affective behaviors (The Center for Vocational Education, p. 32).

Reference: The Center for Vocational Education. Field Test Version Career Planning Support System/Operation Guidance. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1974.

APPENDIX IV-4

LESS AND MORE COMPLEX BEHAVIORS FOR BEHAVIORAL OBJECTIVES

Behavioral objectives, even if written accurately, may not necessarily be "good" objectives. Objectives that describe simple or basic behaviors, such as the knowing and recalling of facts or the showing of interest in an object, are usually easier to write. Basic behaviors may also be important prerequisites to the achievement of program goals, but a set of objectives that only specify simple behaviors may only skim the surface of a problem. You may, therefore, need to consider more complex behaviors, such as the comparing and combining of objects and the accepting of one's own strengths and weaknesses. It may be more difficult to specify complex behaviors in observable and measurable terms, but the effort can result in important benefits.

As an example, a goal for a Career Education program may be as follows:

Students will be able to select a college or university to attend after graduation.

In order for students to select a college, they may need to be able to do the following:

Given a catalogue for a state university, an out-of-state public university, and a private college, the student will list the tuition, living expenses, location, and programs for each.

The student will show awareness of the need for knowing about a variety of colleges before selecting any to attend, as indicated by voluntarily looking at two or more catalogues.

The student will describe the social and cultural activities available at the state university, an out-of-state university, and a private college.

The above objectives describe relatively less complex behaviors. However, students may need to achieve more complex behaviors in order to achieve the goal, such as the following:

The student will compare the cost for attending three different universities or colleges for four years with his/her ability to finance a college education.

Given a major area of study, the student will summarize information on the quality of the program offered by three universities in that major area, using such indicators as a number of courses offered in the program, number of students in the program, and number of faculty.

Given the name of one university, the student will compare the social and cultural offerings of the university with his/her own values. (The Center for Vocational Education, p. 33)

Reference: The Center for Vocational Education. Field Test Version Career Planning Support System/Operation Guidance. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1974.

APPENDIX IV-5

(Because this list is so complete and helpful it is included in its entirety as it appears in the Field Test Version Career Planning Support System/Operation Guidance, The Center for Vocational Education.)

EXAMPLE BEHAVIORS FOR OBJECTIVES*

Cognitive Domain

Level I Knowledge (Emphasis is on recall. Lowest level of complexity.)	choose define complete recognize name list select	identify indicate label match locate reproduce
Level II Comprehension (Emphasis is on showing understanding.)	translate transform give in own words give examples prepare represent change reorder describe express convert classify	interpret rearrange differentiate** distinguish make draw explain paraphrase

---

*The examples were compiled with the help of these sources:

B. S. Bloom, Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain. New York: David McKay Company, Inc., 1965.

D. R. Krathwohl, B. S. Bloom, and B. B. Masia, Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook II: Affective Domain. New York: David McKay Company, Inc., 1964.

Norman E. Gronlund, Stating Behavioral Objectives for Classroom Instruction. London: Collier-Macmillan Limited, 1970.

**Duplication of action words or behavior among levels is not uncommon. The intent of the objective and what is to be measured determines the level in which the behavior falls.

Level III Application (Emphasis is on showing use or application.)	apply make demonstrate discuss use keep records perform relate develop transfer classify discover relate show	compute differentiate** find collect information plan prepare solve generalize choose employ restructure change manipulate operate
Level IV Analysis (Emphasis is on perceiving relationship of the parts and breakdown of the parts.)	analyze determine form generalizations deduce make inferences distinguish discriminate categories contrast detect organize outline separate	debate differentiate** draw conclusions organize identify recognize deduce compare break down
Level V Synthesis (Emphasis is on putting together elements or parts.)	combine design produce relate transmit modify rearrange generate combine devise organize	develop write (original) originate document summarize plan compose synthesize
Level VI Evaluation (Emphasis is on making judgments. The level of greatest complexity.)	evaluate interpret support argue assess consider compare appraise conclude	justify relate judge validate decide contrast

Affective Domain

Level I Receiving (Emphasis is on willingness to receive or to attend to stimulus. The lowest level of complexity.)	shows awareness of the importance of listens attentively shows sensitivity to accepts differences of attends closely to
Level II Responding (Emphasis is on interest in and satisfaction with things.)	completes assignment obeys rules participates in discussion completes volunteers for tasks shows interest in enjoys helping others
Level III Valuing (Emphasis is on beliefs, attitudes, values, and ideas.)	demonstrates belief in appreciates the role of shows concern for demonstrates problem-solving attitude demonstrates commitment to
Level IV Organizing (Emphasis is on organizing, interrelationships, and weighing values.)	recognizes the need for recognizes the role of accepts responsibility for understands and accepts formulates a plan
Level V Characterization by a Value or Value Complex (Emphasis is on internalized, integrated, and internally consistent value system. The highest level of complexity.)	displays demonstrates self-reliance in practices cooperation in uses objective approach in problem solving demonstrates industry, punctuality, and self-discipline maintains

APPENDIX V-1

TOPICS FOR BRAINSTORMING

The following list offers some suggestions for practicing the skill of brainstorming. They may also be used as warm-up topics each time you use brainstorming. The time limit should be short--no more than three minutes. Post the ground rules and you're ready to start!

How many uses can you think of for:
- a paper clip?
- a newspaper?
- a desk?
- a brick?
- an eraser?

How many ways can you think of to:
- keep a shoe on?
- blow bubbles?
- save money?
- save gas?
- serve a bagel?

What people does it take to:
- put a phone call through?
- provide potatoes for you?
- keep a bank operating?
- produce a television show?
- deliver a pizza to you?

What are the things:
- a friend does?
- a mother does?
- a father does?
- a teacher does?
- a neighbor does?

How could you:
- get from here to there?
- send a greeting?
- wrap a package
- give directions?
- lose weight?

APPENDIX V-2

IDEAS FOR ROLE PLAY, SOCIODRAMA AND CREATIVE DRAMATICS

Some of the following ideas are more appropriate for elementary students, while some are more appropriate for secondary students--some are even appropriate for both. Your special knowledge of the students with whom you have contact will be the guide to the appropriateness of the activity. With these as starters you and your pupils will be able to think of many many more!

Role Play

Show what you would do if:
- --you dropped a bottle of soda on the grocery store floor...and it broke.
- --you had a blister on your heel and were late to school
- --a man gave you a check for $1,000,000.

How would you feel if:

- --someone invites you to play after school?
- --the doorbell rings and there, for you, is a great big package?
- --someone ruins your favorite book?
- --you get a letter saying you have not been accepted by the school of your choice?

You and a friend are walking by a fruit stand. He tries to get you to take something. What do you do?

You want to make friends with a specific person. What do you do?

You know that someone is looking at your paper during an exam. What do you do?

How does:
- --a doctor feel about patients?
- --a police officer feel about teenagers?
- --a judge feel about criminals
- --a girl feel about boys
- --a boy feel about girls

Sociodrama

You're about ready to go on an exciting date and your parents tell you you have to be in earlier than you want to be.

You want to tell your boy/girl friend you don't want to go steady.

You have just found out that your parents are getting a divorce. Your best friend is coming up the walk.

You are black and have just been turned down for a job. You feel discrimination was shown.

Your teacher has accused you of copying a theme--and you stayed up all night to get it so good.

You are in control of a substance which, if used correctly, does a great deal of good and if used incorrectly does a great deal of harm. One of your immediate superiors wants you to release some to him.

Creative Dramatics

Pretend you are eating:
- --a caramel
- --an apple
- --a juicy orange
- --an ice cube

Be:
- --an ice cube melting
- --a popcorn machine
- --a street sweeper
- --a puppet
- --the biggest thing ever
- --the smallest thing ever

Play with:
- --an invisible ball
- --a little child
- --a grown-up
- --a balloon
- --a hot potato
- --a water balloon

Walk on:
- --marshmallows
- --nails
- --ice cubes
- --a sticky floor
- --sugar
- --light bulbs
- --eggs

APPENDIX V-3

VALUES CLARIFICATION ACTIVITIES FOR THE CLASSROOM

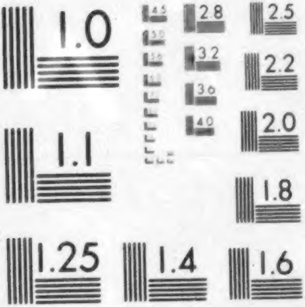
Some of the activities are short and will take only a few minutes while others will require an entire class period to process the idea from start to finish. It is important that the conditions listed in the "Values Clarification" section exist before any activities are conducted. It is also important each activity is carried out with a purpose--for students to have the opportunity to explore and clarify their own values.

Students who do not wish to participate in the activity have the right to pass on any question without attention being called to them. Those who choose to pass on items must remember that others have the right to participate, just as they have the right to pass.

References after activity indicate book from which activity was adapted. Complete reference is found following Values Clarification section of Part 5.

1. Forced Choice: Students respond to the question "Are you more like _____ or _____?" by going to the part of the room designated for their choice. Each student then talks with another student on the side of his or her choice about their choices. Time limit: 2 minutes.
   Examples:
   Are you:
   --more like a blue jay or a cardinal?
   --more like ice cream or pie?
   --more like spring or fall?
   --more like a gust or a breeze?
   --more like a racket or a tennis ball?
   Make up more forced-choice items. When students get the idea, have them ask the forced-choice question. (Simon, et. al., 1972)

2. Values Voting: To give students the opportunity to publicly affirm their values, ask "How many of you _____?" questions. Affirmative answers hold hands up; negative answers, thumbs down; undecided, folded arms; those who wish to pass, take no action.
   Some examples are:
   How many of you:
   --enjoy pizza?
   --have a hobby?
   --are sisters?
   --enjoy watching medical stories on television?
   --have a friend of a different race than your own?
   --think teachers are too easy?
   --daydream?
   --enjoy walks in the woods?
   --have trouble sleeping?
   --know the contents of your top dresser drawer?
   Voting lists should be limited to about 10 items. Students can make up voting lists, too. (Simon, et. al., 1972)


1.0
4.5
5.0
5.6
2.8
3.2
3.6
4.0
2.5
2.2
2.0
1.1
1.8
1.25
1.4
1.6

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

3. Rank Order: Students gain practice in choosing from alternatives by ranking three or four choices according to their preferences. Write the choices on the board and have six to eight students give their rankings. When students are responding, encourage them to name their choices instead of saying "3-2-1" or "I agree with Jane."

Which pet would you rather have
    a horse
    a giraffe
    an elephant

Which do you like best
    Spring
    Summer
    Winter

Which would you rather be
    an only child
    the youngest child
    the oldest child

Which would you least like to be
    very poor
    very sickly
    disfigured

Which would be your job preference
    hard and dirty work at $80 a week
    clean and easy work at $40 a week
    dirty but easy work at $60 a week

(Simon, et. al, 1972)

4. Proud Whip: Students have the opportunity to share with others something they feel really good about. Ask students what they have to be proud of in a particular area. Students may share in small groups or as a large group. When you ask question "whip" around the room having students respond in order.

Sample questions:
- --What is something you are proud of that you decided on your own?
- --What is something you've done to be an important example for a younger child?
- --What is something you did for someone else that was extremely tender?
- --Tell about a family tradition about which you are proud.

Sample starters for young children:
- --I am proud that I learned to _______.
- --I am proud that I can help my family by _________.
- --I am proud that my brother _________.
- --I am proud when the other kids say that I _________.
- --I am proud that I stood up for my friend when ________.

Encourage students to contribute topics for "Proud Whips."
(Simon, et. al., 1972)

5. Newspaper of the Self: This activity will stretch over a period of time. Each student will create a newspaper that is reflective of the things that are important to him or her. The newspaper will have the traditional sections and the format will look like that of a real newspaper. Have student think about the following:
   a. logotype: name or trademark
   b. the news: current happenings in his or her life
   c. the features: special feature section focusing on student preferences in books, movies, television
   d. comics: funny things that have happened to student.
   e. sports: any type of competition could receive attention here--not just sports involvement.
   f. editorials: opinions of student--cartoon would be appropriate, too.
   g. classified ads: What is student buying or selling in life, e.g., "Lost--a little bit of honesty when I told my brother I didn't ride his bike (I did)."

   The focus of project should be for students to gain some insight about themselves rather than for a perfect product to be produced. (Curwin & Curwin, 1974)

6. New Planet: Students will plan a new society on a new planet. They will be given a set of extreme alternatives from which to choose the basis of their new society. Divide the class into groups of four or five. Give them the following directions: "You are in charge of the New Planet, looked upon as a possible answer to Earth's overpopulation problems. Before New Planet, similar in environment to Earth, can be inhabited, many decisions must be made regarding its society and culture. Your task is to make the decisions, in full agreement with your group. All members must agree on answers to the following questions:
   1. Will there be population control or no population control?
   2. Will there be naturally grown food or will it be created by chemical and artificial means?
   3. Will the government be run by a single authority, such as a king or dictator, or will it be a democracy run by and for the people?
   4. Will there be industrialism or no industrialism?
   5. Will there be advanced methods of transportation or will the different communities be isolated?
   6. Will there be a uniform culture or many subcultures?
   7. Will formal education be compulsory or will each child and family have free choice about going to school?
   8. Will there be equal supplies and materials for all or will some get more while others get less?
   9. Will there be guns for everyone or no one?
   10. Will there be government files on every individual or no files on anyone at all?

   Following completion of task have students talk about the way they made the decisions. Refer their decisions to our world by relating them to the United States today. (Curwin & Curwin, 1974)

APPENDIX V-4*

FORM FOR FIELD TRIP EVALUATIONS

(This was written for use at the elementary level, but is adaptable to the secondary level.)

Field Trip Evaluation
(to be completed by teachers and students together)

Place visited ______________________. Is a resource form available in file for this worksite? If not, who was contacted __________________ phone _______________

Brief description of visit ____
____
____
____
____

Who may be interviewed? ____
____

Who may be seen at work? ____
____
____

What was the best thing about the visit? ___________________________
____

What would you tell your friends about the visit? __________________
____
____

Do you recommend that others take the same trip? ________ Why or why not? ____
____
____
____

What could be done to make the trip better? _______________________
____
____
____
____

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*Adapted from: Gysbers, N. C. Career education methods and processes. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1974.

APPENDIX V-5*

SAMPLE LETTER TO PARENTS

(This was written for use at the elementary level, but is adaptable to the secondary level.)

Anywhere Public Schools
Anywhere, Missouri 65301

September 1, 1976

Dear Parents:

This year our students will be involved in an exciting new program--Career Education. You'll be hearing all the details at the parents-teachers-students group meeting on September 17, 1976, but I want to tell you a little bit about it now. I would like to get some of you involved in the program prior to the meeting.

One of the several purposes of the program is to increase students' knowledge of the world of work in general and workers in particular. We want students to understand the interdependence of people, the interrelationship of school and the world, as well as the personal relevance of academic learning to the tasks they are now or will be performing.

We plan to visit actual worksites of people and to interview workers to develop an understanding of what workers do--both on the job and in their leisure time. We will invite workers into our classroom to tell us about their jobs, to show us their tools and to answer our many questions.

I believe (as does the rest of our school staff) that using the parents of our students will enrich the program. I also believe that the utilization of parents will help individual students to develop a greater understanding of their parents' roles as workers and as family members. Will you come to school and tell our class about your occupation? to tell what you do and what tools you use? to tell us the steps required to get to be the worker you are? I hope you will think seriously about it.

Attached is a form for you to fill out to let me know whether or not you'll be able to visit us. Please feel free to call me if you have any questions at all. Thank you for your time and I hope to see you September 17 if not before.

Most sincerely,

Vera Good Teacher

Vera Good Teacher

/jb
Attachment

---

*Adapted from: Gysbers, N. C. Career education methods and processes. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1974.

APPENDIX V-6*

FORM FOR PARENT RESOURCES

(This was written for use at the elementary level, but is adaptable to the secondary level.)

Parent Resources
(Please fill out and return to school)

Name: Mother ______________________ Father ______________________

Child's Name: __________________________

Would either or both of you be willing to come to school to talk with students about your occupational experiences? ______________________

Would it be possible for students to visit your place(s) of business?

____

Mother's Occupation: ___________________________

Father's Occupation: ___________________________

What are your non-work interests? Any special hobbies or talents?

____

____

____

In what other occupations have you worked? ______________________

____

____

Are there states or countries of which you have first hand knowledge?
____________________ Which ones? ______________________________

Is there anyone else in your family who has special skills, knowledge or experiences? ____

____

*Adapted from: Gysbers, N. C. Career education methods and processes. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1974.

APPENDIX V-7a*

LETTER TO HELP PARENTS PREPARE TO BE RESOURCE PERSONS

(This was written for use at the elementary level, but is adaptable to the secondary level.)

Anywhere Public Schools
Anywhere, Missouri 65201

September 25, 1976

Dear Parents:

Thank you for volunteering your time to serve as a resource person in our new Career Education program. We are looking forward to your visit!

Enclosed you will find a page of general information which will help you prepare. If you have any questions that aren't answered on the sheet please feel free to call--we're here to help you in anyway we can.

Again, we all appreciate your time! Your child will be especially glad you're coming.

Most sincerely,

Prince A Pal

Prince A. Pal

/jb
Enclosure

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*Adapted from: Gysbers, N. C. Career education methods and processes. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1974.

APPENDIX V-7b*

INFORMATION FOR CLASSROOM RESOURCE PERSONS

(This was written for use at the elementary level but is adaptable to the secondary level.)

The following ideas are offered to give you an idea of what we expect from you and to give you an idea of what to expect from us. We're pleased you've consented to visit our class. Remember--no one knows more about you than you!

Overview: Through visits with resource persons, students (and teachers) will become more knowledgeable about the world around them. They will understand what people in the world do as workers, as leisure participants, or as family members. They will learn about the various places people are--worksites, home, community. They will understand the effects different events have on people--expected events and unexpected events.

When you arrive: Go to the main office. The secretary will let us know you've arrived and someone will come to get you.

What to wear: Because becoming familiar with the attire of various workers is a part of our program, if possible, please wear what you ordinarily would wear to work. If you wear a uniform we would like for you to tell about it. Why do you wear a uniform? Are there special safety features to it?

What to bring: We want to learn as much as possible about your occupation, so please bring whatever tools, equipment and samples of your work you can.

What to talk about: We want to know the name of your job and where you work. Tell us, too, about the tools, etc. you bring to class. Your uniform has already been mentioned--we want to know about that, too. We want to interview you, too. While you're telling us about your work we will think of other things we want to know. If we ask you a question you don't feel comfortable answering--just tell us--we understand!

How long to take: It's hard for us to sit still longer than 20 or 30 minutes.

Interview: These kinds of things might be asked in the interview:

1. How long have you had your job?
2. Have you ever worked anywhere else?
3. Tell us about a typical day. Do you always do the same thing? You might want to share with us some of the funny or exciting things that happen on your job. What do you like most/least about your work day?
4. What could we expect to make in the beginning. How high could we go?
5. What are the educational and experience prerequisites?
6. Is job seasonal? Explain.
7. Is there a special vocabulary for your job?
8. Where can we get more information?

*Adapted from: Gysbers, N. C. Career education methods and processes. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1974.

APPENDIX VI-1

A Bibliography of Free Materials for Career Education

Accounting

Accounting Careers Council
National Distribution Center
POB 650, Radio City Station
New York, New York 10019

American Institute of Certified
Public Accountants
666 Fifth Avenue
New York, New York 10019

Actuary

Secretary, Casualty Actuarial Society
200 East 42nd Street
New York, New York 10017

Institute of Life Insurance
277 Park Avenue
New York, New York 10017

Advertising

The Advertising Federation of America
655 Madison Avenue
New York, New York 10021

Public Affairs
American Association of Advertising
Agencies, Inc.
200 Park Avenue
New York, New York 10017

Aerospace Engineer

Public Affairs Office
American Institute of Aeronautics and
Astronautics
1290 Avenue of the Americas
New York, New York 10019

Agricultural Aid

Office of Personnel
U. S. Department of Agriculture
Washington, D. C. 20250

Agronomy

The American Society of Agronomy
677 South Segoe Road
Madison, Wisconsin 53711

Air Transportation

Air Transport Association of America
1000 Connecticut Avenue, N. W.
Washington, D. C. 20036

Aluminum Industry

The Aluminum Association
420 Lexington Avenue
New York, New York 10017

Anthropology

The American Anthropological
Association
1703 New Hampshire Avenue, N. W.
Washington, D. C. 20009

Apparel Industry Occupations

American Apparel Manufacturers
Association
200 K Street, N. W.
Washington, D. C. 20006

Archaeology

Archaeological Institute of America
260 West Broadway
New York, New York 10013

Architects

The American Institute of Architects
1785 Massachusetts Avenue
Washington, D. C. 20036

Art

Department of Public Instruction
Philadelphia College of Art
Broad and Pine Streets
Philadelphia, Pennsylvania 19102

Asbestos and Insulating Workers

International Association of Heat and Frost Insulators and Asbestos Workers
1300 Connecticut Avenue, N. W.
Washington, D. C. 20036

Astronomy

American Astronomical Society
211 FitzRandolph Road
Princeton, New Jersey 08540

Interagency Board of U. S. Civil Service
Examiners for Washington, D. C.
1900 E Street, N. W.
Washington, D. C. 20415

Automobile Service and Salespeople

Automotive Service Industry Association
230 North Michigan Avenue
Chicago, Illinois 60601

Automotive Service Industry Association
168 North Michigan Avenue
Chicago, Illinois 60601

National Automobile Dealers Association
2000 K Street, N. W.
Washington, D. C. 20006

Aviation

Department of Transportation
Federal Aviation Administration
Washington, D. C. 20590

Baking Industry

American Bakers Association
20 North Wacker Drive
Chicago, Illinois 60606

Banking

Banking Education Committee
The American Bankers Association
90 Park Avenue
New York, New York 10016

Barbering

Associated Master Barbers and Beauticians of America
219 Greenwish Road, POB 17782
Charlotte, North Carolina 28211

Beauty Culture

National Beauty Career Center
3839 White Plains Road
Bronx, New York 10467

Bellperson

American Hotel and Motel Association
221 West 57th Street
New York, New York 10019

Biochemistry

American Society of Biological Chemists
6950 Wisconsin Avenue, N. W.
Washington, D. C. 20014

Biologist

American Institute of Biological Sciences
3900 Wisconsin Avenue, N. W.
Washington, D. C. 20016

Blacksmith and Boilermaker

International Brotherhood of Boilermakers, Iron Shipbuilders, Blacksmiths, Forgers and Helpers
Eighth at State Avenue
Kansas City, Kansas 66101

Bookkeeping Clerk

Bureau of Educational Assistance Program
Division of Vocational and Technical Education
U. S. Office of Education
Washington, D. C. 20202

Botany

Office of the Secretary
Botanical Society of America
Department of Botany
Indiana University
Bloomington, Indiana 47401

Building Trades

Associated General Contractors of America, Inc.
1957 E Street, N. W.
Washington, D. C. 20006

American Federation of Labor and Congress of Industrial Organizations
Building and Construction Trades Department
815 16th Street, N. W.
Washington, D. C. 20006

Business

Public Relations Department
Rochester Institute of Technology
Box 3404
Rochester, New York 14614

Carpenter

Associated General Contractors of America, Inc.
1957 E Street, N. W.
Washington, D. C. 20006

Cartooning

Newspaper Comics Council
260 Madison Avenue
New York, New York 10016

Ceramics

Business Manager
The American Ceramic Society
4055 North High Street
Columbus, Ohio 43214

Chemical Engineers

American Institute of Chemical Engineers
345 East 47th Street
New York, New York 10017

Chemistry

Manufacturing Chemists Association
1825 Connecticut Avenue, N. W.
Washington, D. C. 20009

American Chemical Society
1155 16th Street, N. W.
Washington, D. C. 20036

Chiropractors

American Chiropractic Association
American Building
2200 Grand Avenue, POB 1535
Des Moines, Iowa 52805

City and Regional Planner

American Institute of Planners
917 15th Street, N. W.
Washington, D. C. 20005

Civil Engineers

American Society of Civil Engineers
345 East 47th Street
New York, New York 10017

Clerical and Related Occupations

Division of Vocational & Technical Education
Bureau of Adult Vocational & Library Programs
U. S. Office of Education
Washington, D. C. 20202

Conservation

Soil Conservation Service
U. S. Department of Agriculture
Washington, D. C. 20250

Bureau of Land Management
Denver Service Center
Federal Center Building 50
Denver, Colorado 80225

Construction

Assistant Director of Education
General Building Contractors Association, Inc.
Suite 1212, #2 Penn Center Plaza
Philadelphia, Pennsylvania 19102

International Hod Carriers' Building and Common Laborers' Union of America
905 16th Avenue
Washington, D. C. 20006

Consumer Finance

Educational Services Division
National Consumer Finance Association
1000 16th Street, N. W.
Washington, D. C. 20036

Cooks and Chefs

Educational Director, National Restaurant Association
1530 North Lake Shore Drive
Chicago, Illinois 60610

Cosmetologist--Beauty Operator

National Hairdressers and Cosmetologists Association
175 Fifth Avenue
New York, New York 10010

Cylinder-press worker

Printing Industries of America, Inc.
20 Chevy Chase Circle, N. W.
Washington, D. C. 20015

Data Processing

Data Processing Management Association
505 Busse Highway
Park Ridge, Illinois 60068

Dental Assistant

Division of Dental Health
8120 Woodmont Avenue
Bethesda, Maryland 20014

Dental Hygienists

American Dental Hygienists Association
211 East Chicago Avenue
Chicago, Illinois 60611

Dental Laboratory Technician

National Association of Certified Dental Laboratories, Inc.
3801 Mt. Vernon Avenue
Alexandria, Virginia 22305

Dentistry

American Dental Association
Council on Dental Education
211 East Chicago Avenue
Chicago, Illinois 60611

Dietitians

The American Dietetic Association
620 North Michigan Avenue
Chicago, Illinois 60611

Drafting Expert

American Institute for Design and Drafting
305 South Andrews Avenue, Suite 610
Fort Lauderdale, Florida 33301

American Federation of Technical Engineers
1126 16th Street, N. W.
Washington, D. C. 20036

Public Relations Staff
General Motors Building
3044 West Grand Boulevard
Detroit, Michigan 48202

Driving Occupations

American Trucking Association
1616 P Street, N. W.
Washington, D. C. 20036

Dry Cleaner

The National Institute of Dry Cleaning
909 Burlington Avenue
Silver Spring, Maryland 20910

Electrician--Electronics

National Electrical Contractors Association
1120 18th Street, N. W.
Washington, D. C. 20036

Electronic Industries Association
2001 Eye Street, N. W.
Washington, D. C. 20006

Engineers--Engineering

Engineers Council for Professional Development
345 East 47th Street
New York, New York 10017

Entomology

Entomological Society of America
4603 Calvert Road
College Park, Maryland 20740

FBI Special Agents

The Federal Bureau of Investigation
U. S. Department of Justice
Washington, D. C. 20535

Fire Fighter--Fire Protection Engineering

International Association of Fire Fighters
905 16th Street, N. W.
Washington, D. C. 20006

Society of Fire Protection Engineers
60 Batterymarch Street
Boston, Massachusetts 02110

Food Processing--Food Retailing

Institute of Food Technologists
Suite 2120, 221 North LaSalle Street
Chicago, Illinois 60611

National Associations of Food Chains
1725 Eye Street, N. W.
Washington, D. C. 20006

Forestry--Forestry Aid

U. S. Department of Agriculture, Forest Service
Washington, D. C. 20250

American Forestry Association
919 17th Street
Washington, D. C. 20006

Foundry Worker

Foundry Educational Foundation
1138 Terminal Tower
Cleveland, Ohio 44113

Furniture Upholsterers

Upholsterers International Union of North America
1500 North Broad Street
Philadelphia, Pennsylvania 19121

Gas-Appliance Serviceperson

Public Relations Department
Gas Appliance Manufacturers Association
1901 North Fort Myer Drive
Arlington, Virginia 22209

Geography

Association of American Geographers
1146 16th Street, N. W.
Washington, D. C. 20036

Geologists

American Geological Institute
2201 N Street, N. W.
Washington, D. C. 20036

Graphics

Educational Council of the Graphic Art Industry, Inc.
4615 Forbes Avenue
Pittsburgh, Pennsylvania 15213

Guidance and Counseling

American School Counselor Association
1607 New Hampshire Avenue, N. W.
Washington, D. C. 20009

Home Economist

American Home Economics Association
1600 20th Street, N. W.
Washington, D. C. 20009

Horticulture

American Society for Horticulture Science
POB 109
St. Joseph, Missouri 49085

Hospital Fields

Pfizer Laboratories
Public Relations Department
235 East 42nd Street
New York, New York 10017

American College of Hospital Administrators
840 North Lake Shore Drive
Chicago, Illinois 60611

Hotel Occupations

American Hotel and Motel Association
888 Seventh Avenue
New York, New York 10019

Household Workers

National Committee on Household Employment
1346 Connecticut Avenue, N. W.
Washington, D. C. 20036

Industrial Designers

Industrial Designers Society of America
60 West 55th Street
New York, New York 10019

Instrument Repairperson

Instrument Society of America
530 William Penn Place
Pittsburgh, Pennsylvania 15200

Insurance

Insurance Information Institute
110 William Street
New York, New York 10038

Interior Designers and Decorators

National Society of Interior Designs, Inc.
Suite 700, 157 West 57th Street
New York, New York 10019

Jeweler

Retail Jewelers of America, Inc.
711 14th Street, N. W.
Washington, D. C. 20005

Director of Affiliate Services
Retail Jewelers of America, Inc.
1025 Vermont Avenue, N. W.
Washington, D. C. 20005

Journalism

American Newspaper Publishers Association
750 Third Avenue
New York, New York 10017

Sigma Delta Chi
Professional Journalistic Society
35 East Waker Drive
Chicago, Illinois 60601

Landscaping

American Association of Nurserymen, Inc.
835 Southern Building
Washington, D. C. 20005

Lawyers

The American Bar Association
1155 East 60th Street
Chicago, Illinois 60603

Library Assistant

American Library Association
50 East Huron Street
Chicago, Illinois 60603

Machinist Occupations

The National Machine Tool Builders Association
2139 Wisconsin Avenue, N. W.
Washington, D. C. 20007

Management

American Management Association
The American Management Association Building
135 West 50th Street
New York, New York 10020

Manufacturing Engineer

American Society of Tool and Manufacturing Engineers
20501 Ford Road
Dearborn, Michigan 48128

Market Research Worker

American Marketing Association
230 North Michigan Avenue
Chicago, Illinois 60601

Mathematician

American Mathematical Society
POB 6248
Providence, Rhode Island 02904

Public Relations Staff
General Motors Building
3044 West Grand Boulevard
Detroit, Michigan 48202

Mechanics

International Union, United Automobile Aerospace and Agriculture Implement Workers of America
8000 East Jefferson Avenue, N. W.
Washington, D. C. 20036

National Automobile Dealers Association
2000 K Street, N.W.
Washington, D. C. 20006

International Association of
Machinists and Aerospace Workers
1300 Connecticut Avenue, N. W.
Washington, D. C. 20036

Public Relations Staff
General Motors Building
3044 West Grant Boulevard
Detroit, Michigan 48202

Medical Assistant

American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

Medical Laboratory Assistants

Secretary, Board of Certified
Laboratory Assistants
9500 South California Avenue
Evergreen Park, Illinois 60642

Medical Laboratory

American Society of Clinical
Pathologists
Registry of Medical Technologists
POB 4872
Chicago, Illinois 60680

Medical Record Librarians

The American Association of Medical
Record Librarians
875 N. Avenue, Suite 1850
Chicago, Illinois 60611

Medical Technologists

American Society of Medical
Technologists
Suite 1600, Hermann Professional
Building
Houston, Texas 77025

Medicine

Council on Medical Education
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

Memorial Service

National Funeral Directors Association
135 West Wells Street
Milwaukee, Wisconsin 53203

Metallurgy

The Metallurgical Society of AIME
345 East 47th Street
New York, New York 10017

Meteorologists

American Meteorological Society
45 Beacon Street
Boston, Massachusetts 02108

Microbiology

The American Society for Microbiology
1913 Eye Street, N. W.
Washington, D. C. 20006

Mineral Industry

American Institute of Mining,
Metallurgical and Petroleum Engineers
345 East 47th Street
New York, New York 10019

Modeling

Modeling Association of America
Office of the Executive Director
34 West 53rd Street
New York, New York 10019

Musicians and Music Teachers

National Association of Schools of
Music
1501 New Hampshire Avenue, N. W.
Washington, D. C. 20036

Newspaper Reporting and Publishing

American Newspaper Publishers
Association
750 Third Avenue
New York, New York 10017

Nuclear Scientist

Division of Public Information
Atomic Energy Commission
Washington, D. C. 20545

Nursing: Practical, Aide, and Orderly

National League for Nursing
10 Columbus Circle
New York, New York 10019

American Hospital Association
840 North Lake Shore Drive
Chicago, Illinois 61611

Oceanographers

The International Oceanographic Foundation
10 Rickenbacker Causeway
Virginia Key
Miami, Florida 33149

American Society for Oceanographers
A Department of the Marine Technology Society
1730 M Street, N. W., Suite 412
Washington, D. C. 20036

Office-Machine Serviceperson

Business Machine and Office Appliance Mechanics (I.U.E.)
International Headquarters
160 Fifth Avenue, Room 912
New York, New York 10010

Office Worker

Public Relations Staff
General Motors Building
3044 West Grand Boulevard
Detroit, Michigan 48020

Offset Pressworker

Graphic Arts Technical Foundation
4615 Forbes Avenue
Pittsburg, Pennsylvania 15213

Optometry

American Optometric Association
7000 Chipewa Street
St. Louis, Missouri 63119

Operating Engineers

International Union of Operating Engineers
1125 17th Street, N. W.
Washington, D. C. 20036

Osteopathic Physicians

American Osteopathic Association
212 East Ohio Street
Chicago, Illinois 60611

Painter

Painting and Decorating Contractors Association of America
2625 West Paterson Avenue
Chicago, Illinois 60605

Paper Industry

American Paper Institute
260 Madison Avenue
New York, New York 10016

Parole and Probation

NCCD Information Center Librarian
National Council on Crime Librarian
44 East 23rd Street
New York, New York 10010

Pathologist-Speech and Audiologists

American Speech and Hearing Association
9030 Old Georgetown Road
Washington, D. C. 20014

Personnel Work

American Management Association
135 West 50th Street
New York, New York 10020

Pharmacists

American Pharmaceutical Association
2215 Constitution Avenue, N. W.
Washington, D. C. 20006

Photoengravers--Photographers

American Photoengravers Association
166 West Van Buren Street
Chicago, Illinois 60604

Professional Photographers of America, Inc.
1090 Executive Way, Oak Leaf Commons
Des Plaines, Illinois 60018

Physicists

American Institute of Physics
335 East 45th Street
New York, New York 10017

Interagency Board of U. S. Civil Service Examiners for Washington, D. C.
1900 E Street, N. W.
Washington, D. C. 20415

Physiology

American Physiological Society
9650 Rockville Pike
Bethesda, Maryland 20014

Planning

American Institute of Planners
917 15th Street, N. W.
Washington, D. C. 20005

Plasterer

Bricklayers, Masons and Plasterer's International Union of America
815 15th Street, N. W.
Washington, D. C. 20005

Plumber or Pipe Fitter

United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada
901 Massachusetts Avenue, N. W.
Washington, D. C. 20010

Podiatrists

American Podiatry Association
3301 16th Street, N. W.
Washington, D. C. 20010

Law Enforcement Officers

International Association of Chiefs of Police
1318 18th Street, N. W.
Washington, D. C. 20036

Printing Occupations

Printing Industries of America, Inc.
5223 River Road
Washington, D. C. 20016

International Typographical Union
POB 157
Colorado Springs, Colorado 80901

American Newspaper Publishers Association
750 Third Avenue
New York, New York 10017

Education Council of the Graphic Arts Industry, Inc.
4615 Forbes Avenue
Pittsburgh, Pennsylvania 15213

International Printing Pressmen and Assistant's Union of North America
1730 Rhode Island Avenue
Washington, D. C. 20036

Programmers

Data Processing Management Association
524 Busse Highway
Park Ridge, Illinois 60068

Psychiatry

Roche Laboratories
Division of Hoffman-LaRoche, Inc.
Nutley, New Jersey 07110

Psychologists

American Psychological Association
1200 17th Street, N. W.
Washington, D. C. 20036

Public Relations

Career Guidance
Public Relations Society of America
845 Third Avenue
New York, New York 10022

Public Servant

U. S. Civil Service Commission
Eighth and F Streets, N. W.
Washington, D. C. 20415

Purchasing Agent

National Association of Purchasing Management
11 Park Place
New York, New York 10007

Radio

National Association of Broadcasters
1771 N Street, N. W.
Washington, D. C. 20036

Radiologists

The American Society of Radiologic Technology
645 N. Michigan Avenue, Room 620
Chicago, Illinois 60611

The American Registry of Radiologic Technologists
2600 Wayzata Boulevard
Minneapolis, Minnesota 55405

Railroad Occupations

Association of American Railroads
Transportation Building
Washington, D. C. 20006

Real Estate Brokers, Salespeople

National Association of Real Estate Boards
Department of Education
155 East Superior Street
Chicago, Illinois 60611

Recreation

National Recreation and Park Association
Professional Development Service
1700 Pennsylvania Avenue, N. W.
Washington, D. C. 20006

Refrigeration Mechanic

Refrigeration Service Engineers Society
422 North Waller Avenue
Chicago, Illinois 60644

Range Managers

American Society of Range Management
Box 13302
Portland, Oregon 97213

Rehabilitation Services

American Speech and Hearing Association
1001 Connecticut Avenue, N. W.
Washington, D. C. 20006

Retailing

U. S. Department of Commerce
Washington, D. C. 20230

Public Relations Department
Rochester Institute of Technology
Box 3404
Rochester, New York 14714

Roofers

United Slate, Tile and Composition
Roofers, Damp and Waterproof
Workers Association
1125 7th Street, N. W.
Washington, D. C. 20036

Salespersons

Sales and Marketing Executives
International
630 Third Avenue
New York, New York 10017

Sanitarians

National Environmental Association
1600 Pennsylvania
Denver, Colorado 80203

Scientist

National Science Teachers Association
1201 16th Street, N. W.
Washington, D. C. 20006

Secretary

United Business Schools Association
1730 M Street, N. W.
Washington, D. C. 20036

Sheet Metal Worker

Sheet Metal Workers' International
Association
1000 Connecticut Avenue, N. W.
Washington, D. C. 20036

Shoe Repairperson

Shoe Service Institute of America
222 West Adams Street
Chicago, Illinois 60606

Singers and Singing Teachers

National Association of Schools of
Music
1501 New Hampshire Avenue, N. W.
Washington, D. C. 20036

Social Worker

National Commission for Social Work
Careers of the National Association
of the Social Workers, Inc.
2 Park Avenue
New York, New York 10016

Sociology

The American Sociological Association
1001 Connecticut Avenue, N. W.
Washington, D. C. 20036

Space Scientist

Office of Educational Programs and
Services
National Aeronautics and Space
Administration
400 Maryland Avenue
Washington, D. C. 20025

Speech and Hearing Therapist

American Speech and Hearing
Association
9030 Old Georgetown Road
Washington, D. C. 20014

Statistics

American Statistical Association
810 18th Street, N. W., Room 703
Washington, D. C. 20006

Stewardess--Airplane

Air Transport Association of America
1000 Connecticut Avenue, N. W.
Washington, D. C. 20036

Surveyors

American Congress on Surveying and Mapping
Woodward Building
Washington, D.C. 20005

Teaching

National Center for Information on Careers in Education
1607 New Hampshire Avenue, N. W.
Washington, D. C. 20009

Association for Childhood Education International
3615 Wisconsin Avenue, N. W.
Washington, D. C. 20016

U. S. Department of Health, Education and Welfare
Office of Education
Washington, D. C. 20202

Technicians--Television and Radio

National Alliance of Television Associations
5908 South Troy Street
Chicago, Illinois 60629

Technician—X-Ray

The American Registry of Radiologic Technology
2600 Wayzata Boulevard
Minneapolis, Minnesota 55405

Telephone Industry

Communications Workers of America
1808 Adams Mill Road, N. W.
Washington, D. C. 20009

Communications Workers of America
1925 K Street, N. W.
Washington, D. C. 20006

Television

National Association of Broadcasters
1771 N Street, N. W.
Washington, D. C. 20036

Teller

American Bankers Association
Personnel Administration and Management Development Committee
90 Park Avenue
New York, New York 10016

Therapists--Occupational--Physical

American Occupational Therapy Association
251 Park Avenue South
New York, New York 10010

Trucking

American Trucking Association
1616 P Street, N. W.
Washington, D. C. 20036

Typography

International Typographic Composition Association, Inc.
2233 Wisconsin Avenue, N. W.
Washington, D. C. 20007

Vending Machine Mechanics

National Automatic Merchandising Association
7 South Dearborn Street
Chicago, Illinois 60603

Veterinarians

American Veterinary Medical Association
600 South Michigan Avenue
Chicago, Illinois 60605

Waiters and Waitresses

Educational Director
National Restaurant Association
1530 North Lake Shore Drive
Chicago, Illinois 60611

Watch Repair

American Watchmakers Institute
POB 1101
Cincinnati, Ohio 45211

Wholesaling

National Association of Wholesalers
1725 K Street, N. W.
Washington, D. C. 20006

Youth Services

Personnel and Training Division
Boy Scouts of America
New Brunswick, New Jersey 08903

Director of Field Operations
B'nai B'rith Youth Organization
Washington, D. C. 20036

APPENDIX VI-2*

CAREER EDUCATION PROGRAM MATERIALS EVALUATION FORM

Title ____________________

Author ____________________

Publisher or Producer ____________________

Publication or Production Date ____________________ Cost __________

Type media:
____ film
____ filmstrip
____ pamphlet
____ book
____ tape
____ kit
____ game
____ poster
____ record
____ picture
____ model

Recommended grade level: K ____ 2 ____ 4 ____ 6-8 ____
1 ____ 3 ____ 5 ____ 9-12 ____

Special Education ____

Yes	No	NA	
___	___	___	1. Is the information general enough so as to be useful over a period of time, i.e., is it free of information that is subject to rapid change such as salary and job availability?
___	___	___	2. Are occupational descriptions accurate?
___	___	___	3. Does the material focus on one or a small number of similar occupations?
___	___	___	4. Are photographs and illustrations related to the material presented?
___	___	___	5. Is this material free of the influence of recruitment and advertisement?
___	___	___	6. Is this material usable in a classroom?
___	___	___	7. Can this material be used by students independently or in small groups?
___	___	___	8. Does the material reflect positive attitudes toward all work?
___	___	___	9. Can these materials be used with the audio visual equipment presently in use by the schools?
___	___	___	10. Can you identify an existing or proposed unit into which this material can be integrated?

*Adapted from a form developed by Nick Vukmer for the Board of Education, St. Mary's County, Leonardtown, Maryland 20650.

Yes	No	NA	
___	___	___	11. Is the vocabulary appropriate for intended age level?
___	___	___	12. Is this material free of sex/race/job stereotyping?
___	___	___	13. Does this item form part of a series?

Indicate learning areas for which this material is most appropriate. Use the following scale:

1 - especially appropriate
2 - moderately appropriate
3 - useful

	K-3	7-9	10-12
Self Knowledge			
Life Roles, Settings, Events			
Life Planning			
Academic and Vocational Skills			

____________________ recommended for purchase ________ not recommended

____________________ recommended for purchase in the absence of better material

____
EVALUATOR

____
SCHOOL

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